

GENERAL NOTES: FLORIDA BUILDING CODE

1- CODE: THIS PRODUCT HAS BEEN TESTED AND DESIGNED IN ACCORDANCE WITH THE 5TH EDITION FLORIDA BUILDING CODE (2014) INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).

2- DEFINITION: THIS PRODUCT IS A FIXED TYPE WINDOW DESIGNED, CONSTRUCTED AND TESTED TO PROVIDE PROTECTION FROM HURRICANE FORCE WINDS AND WIND BORNE DEBRIS (LARGE MISSILE) WITHIN THE ALLOWABLE DESIGNED PRESSURES AND LIMITATIONS STATED IN THIS APPROVAL. INSTALLATION OF HURRICANE PROTECTION DEVICES IS NOT REQUIRED.

3- DESIGN LOADS: THE DESIGNED LOADS MUST BE CALCULATED BY A PROFESSIONAL ARCHITECT OR ENGINEER FOR EACH SPECIFIC PROJECT. THE CALCULATED DESIGNED PRESSURE MUST NOT EXCEED THE ALLOWABLE WINDOW PRESSURE.

4- MATERIAL: GLAZING TO BE IMPACT LAMINATED GLASS AS SPECIFIED ON THIS APPROVAL.

5- FASTENERS: ASSEMBLY SCREWS AND ANCHORS SHALL BE AS SPECIFIED IN THE CURRENT SET OF DRAWINGS. INSTALLATION AND LOADS AS PER THIS APPROVAL. ANCHOR QUANTITY & SPACING MUST NOT EXCEED THE MAXIMUM LIMITS SPECIFIED BY THIS APPROVAL.

6- USE: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, ARCHITECT OR ENGINEER OF RECORD TO VERIFY THE FOLLOWING:
 6.1- THE STABILITY OF THE STRUCTURE WHERE THE PRODUCT IS TO BE ATTACHED INSURING PROPER ANCHORAGE.

6.2- THE SITE SPECIFIC PROJECT CRITERIA, SUCH AS BUT NOT LIMITED TO, LOCAL CODE REQUIREMENTS, DESIGNED PRESSURES ETC.

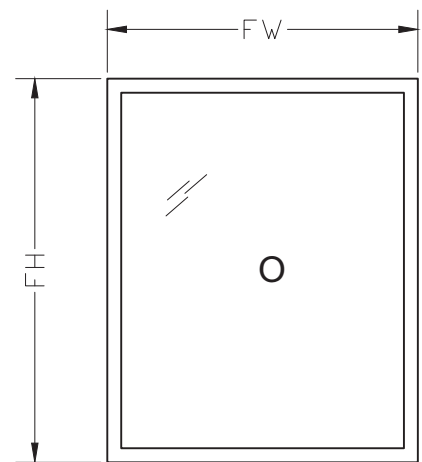
6.3- THAT THIS APPROVAL IS ADEQUATE TO THE SPECIFIC PROJECT.

7- 33 1/3% INCREASE IN ALLOWABLE LOADS HAVE NOT BEEN USED IN THE DESIGN OF THE ANCHORS FOR THIS PRODUCT APPROVAL, HOWEVER, WOOD SCREWS WITH 1.6 INCREASE FOR WIND LOAD DURATION HAVE BEEN USED.

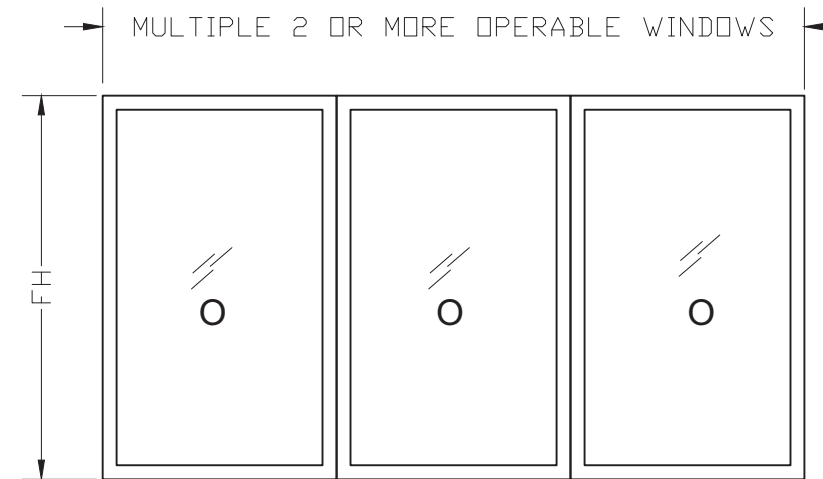
8- DISSIMILAR MATERIALS: MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL, THAT COME IN CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 5TH EDITION FLORIDA BUILDING CODE (2014).

FOR ALLOWABLE SIZES AND PRESSURES REFER TO:
SHEET 2

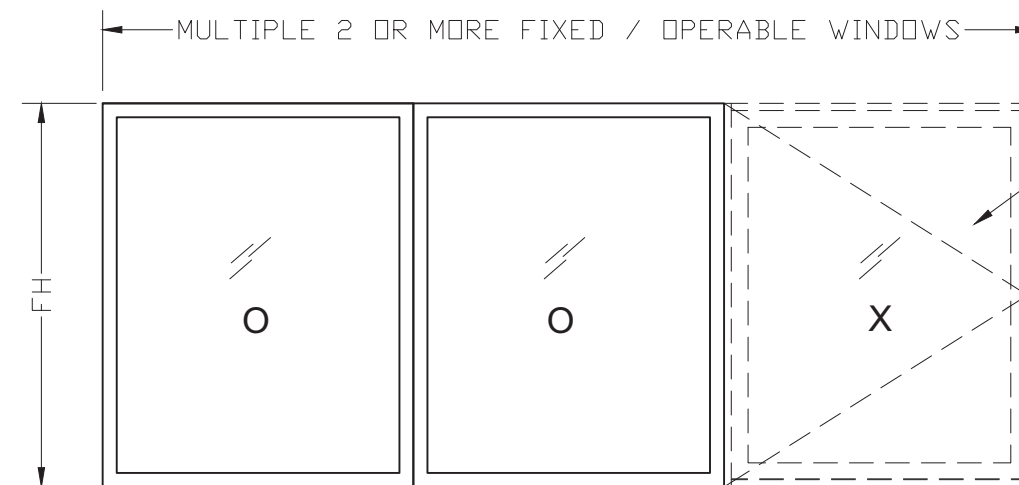
TYPICAL ELEVATIONS VIEW FROM OUTSIDE



(O) SINGLE
 FIXED WINDOW
 SEE SHEET 2 FOR RATING



(OO, OOO, OOO)n
 MULTIPLE FIXED WINDOWS
 SEE SHEET 2 FOR RATING



(XO, XOX, OXO, OXXOX)n
 MULTIPLE COMBINATION OF CASEMENT OUT AND FIXED WINDOWS
 SEE SHEET 2 FOR RATING

TABLE OF CONTENTS:

SHEET	DESCRIPTION
1 of 7	GENERAL NOTES, INDEX AND TYPICAL ELEVATIONS
2 of 7	TABLE 1 & 2 DESIGN RATING FOR SINGLE AND MULTIPLES UNITS
3 of 7	TYPICAL DETAILS
4 of 7	ANCHORAGE LAY-OUT WITH STRAPS
5 of 7	ANCHORAGE LAY-OUT WITH SHEAR CLIP
6 of 7	WINDOW COMPONENTS AND BILL OF MATERIAL
7 of 7	GLAZING DETAILS & CORNER ASSEMBLY

LIMITATIONS OF USE

A- THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT. i.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.E.D.

B- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.

C- THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.

D- SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D.

E- THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

MCY ENGINEERING, INC.
 GLAZING CONSULTANTS
 8501 SW 124 Ave. Ste. 205A P: 305.271.0117
 MIAMI, FL 33183 F: 305.279.6818
 www.MCYEngineering.com MCY.Engineering@Att.net

NRAP SERIES 2500 FIXED WINDOW (L.M.I.)
NR ARCHITECTURAL PRODUCTS
 4348 WESTROADS DRIVE
 WEST PALM BEACH, FL 33407
 TEL: (561) 844-1121 FAX: (561) 844-6131

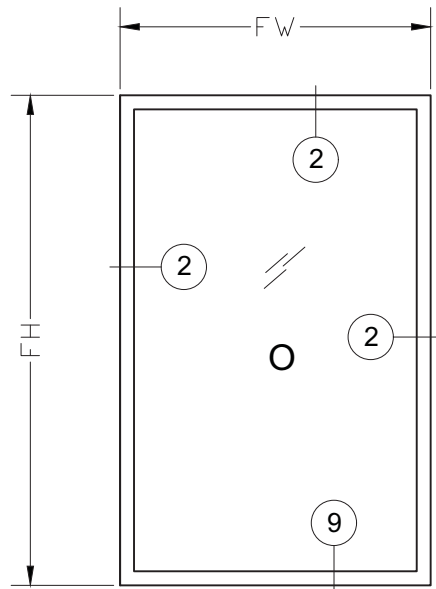
Rev. No.	Date	Drawn By	Description

Drawn Date: 03/20/2017 Scale: AS NOTED
 DRAWING NO.: AD17-10
 FLORIDA APPROVAL
 FL #22026.1
 Sheet No.: 01 OF 07

**TABLE 1
DESIGNED RATING FOR
SINGLE FIXED UNITS (PSF)**

MAX. FRAME WIDTH (FW) HEIGHT (FH)		PRESSURES EXT (+) INT (-)	
24	96	120	
32	72	120	
38.75	60	120	
44	52	120	
48	48	120	
52	44	120	
60	38.75	120	
72	32	120	
96	24	120	

* FRAME WIDTH AND HEIGHT
IN INCHES
* PRESSURES IN PSF
* WINDOW AREA MUST NOT
EXCEED 16.15 SQFT
DLO=FW-4.375 OR FH-4.375

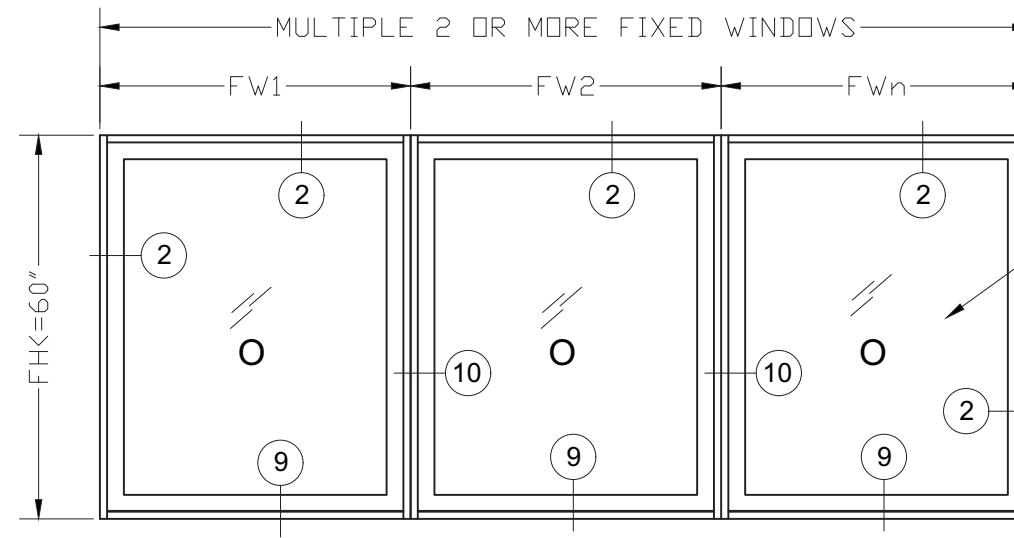


(O) SINGLE
FIXED WINDOW

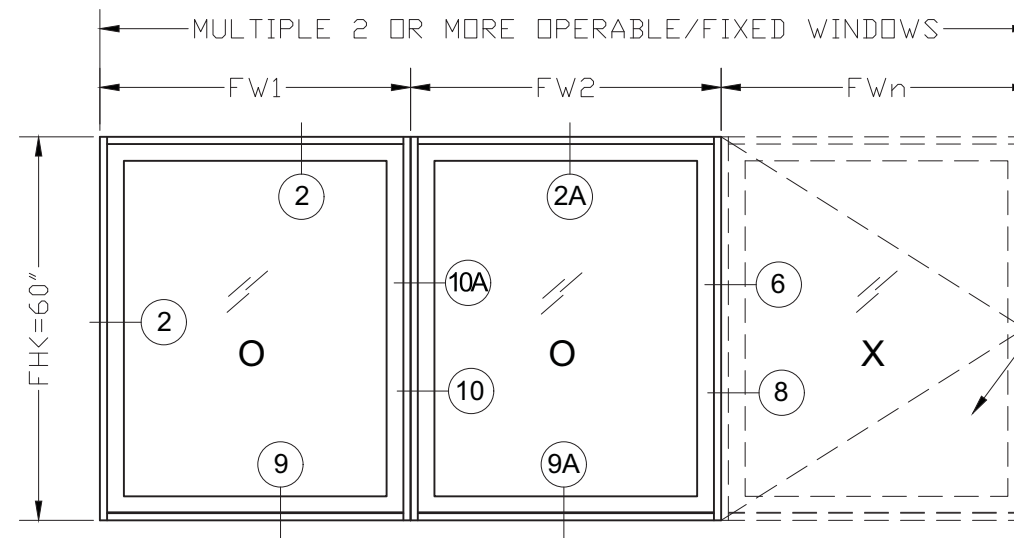
**TABLE 2
DESIGNED RATING FOR MULLIONS
ON MULTIPLE FIXED OR/AND
FIXED/CASEMENT UNITS (PSF)**

TM	FH	MULL TYPE 6/ 8/ 10/ 10A EXT(+) INT(-)
24	60	120
32	60	120
38.75	60	120
44	52	120
48	48	120
54	43	120
60	39	120
66	35	120
72	32	120

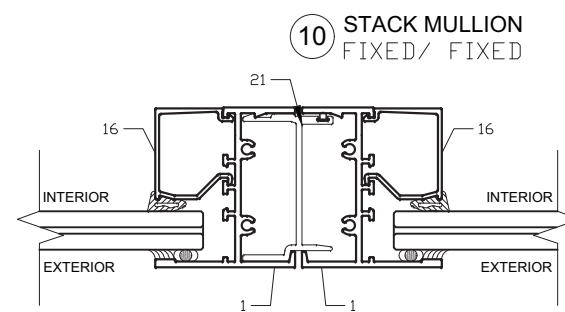
TM- MAXIMUM TRIBUTARY
MODULE WIDTH IN INCHES
FH- MAXIMUM FINISHED HEIGHT
IN INCHES
PRESSURES IN PSF
DLO=FW-4.375 OR FH-4.375



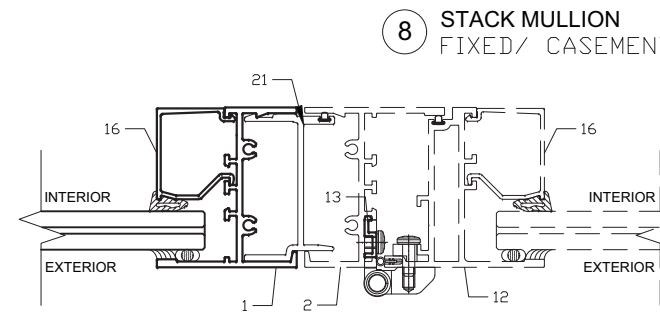
ALLOWABLE PRESSURE
BASED ON THE MIN.
PRESSURE FROM
TABLE 1 & 2



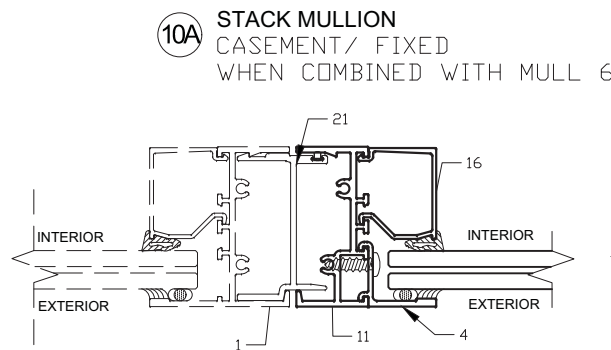
ALLOWABLE PRESSURE
BASED ON THE MIN.
PRESSURE FROM
TABLE 1, 2 AND
CASEMENT WINDOW
APPROVAL.



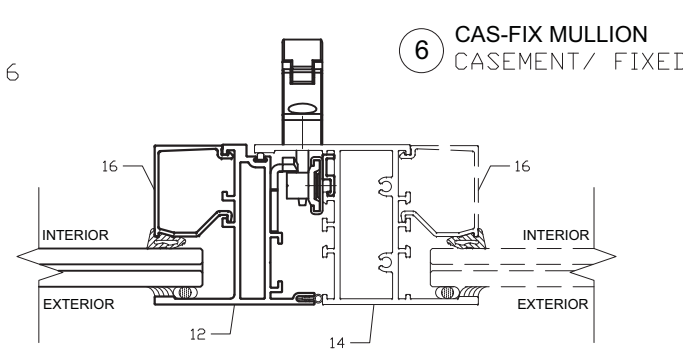
10 STACK MULLION
FIXED/ FIXED



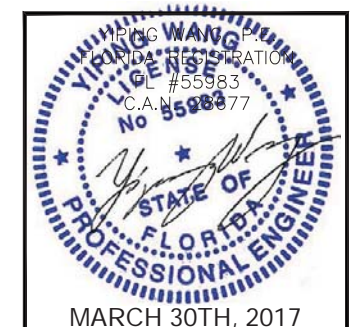
8 STACK MULLION
FIXED/ CASEMENT



10A STACK MULLION
CASEMENT/ FIXED
WHEN COMBINED WITH MULL 6



6 CAS-FIX MULLION
CASEMENT/ FIXED



NRAP SERIES 2500 FIXED WINDOW (L.M.I.)

NR ARCHITECTURAL PRODUCTS

4348 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
TEL: (561) 844-1121 FAX: (561) 844-6131

MCY ENGINEERING, INC.
GLAZING CONSULTANTS

8501 SW 124 Ave. Ste. 205A P: 305.271.0117
MIAMI, FL 33183 F: 305.279.6818

www.MCYEngineering.com MCY.Engineering@Att.net

Rev. No.	Date	Drawn By	Description

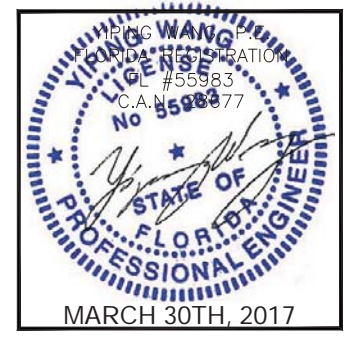
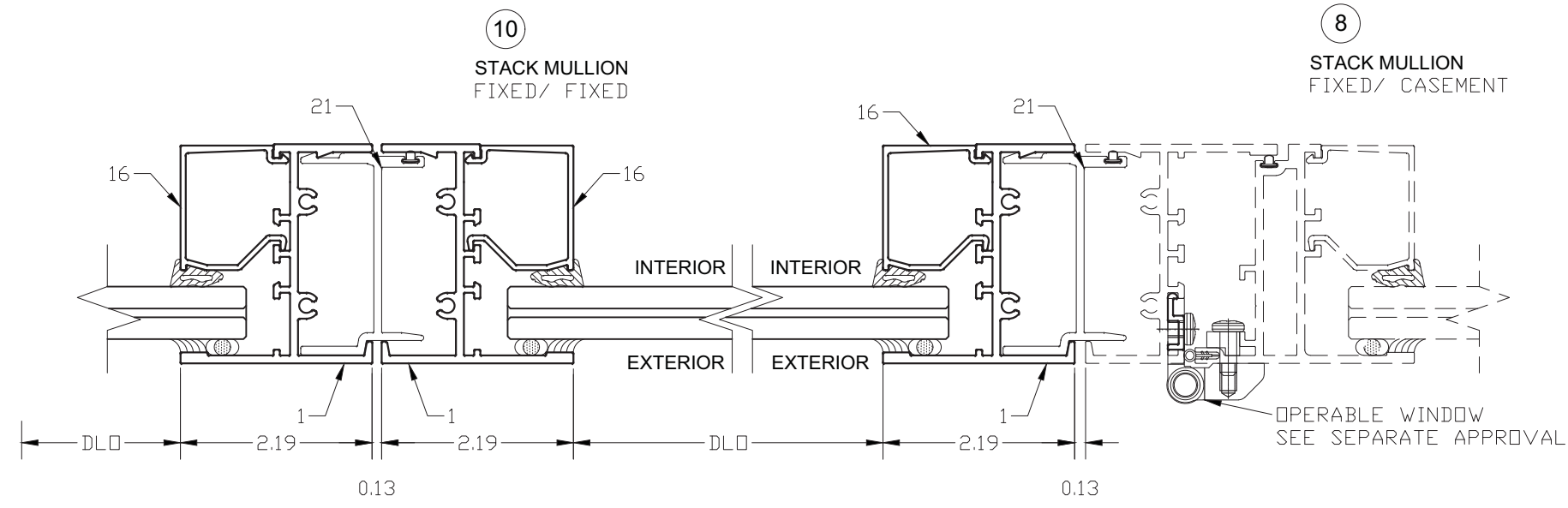
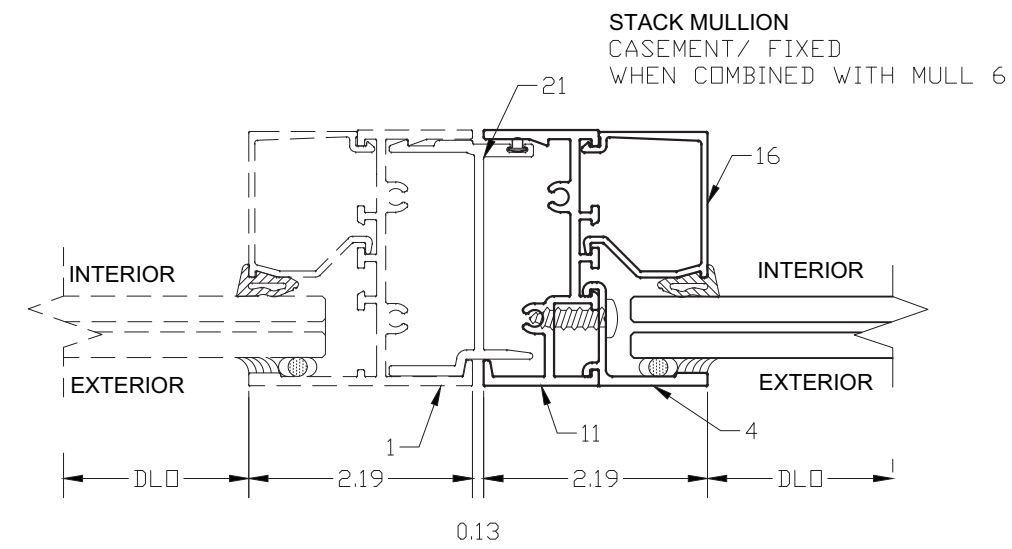
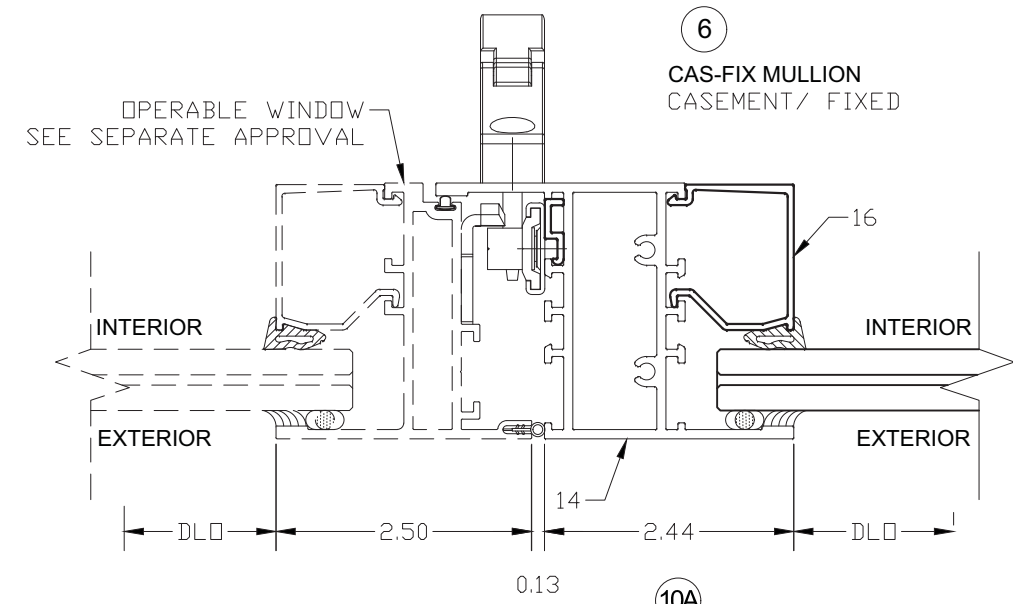
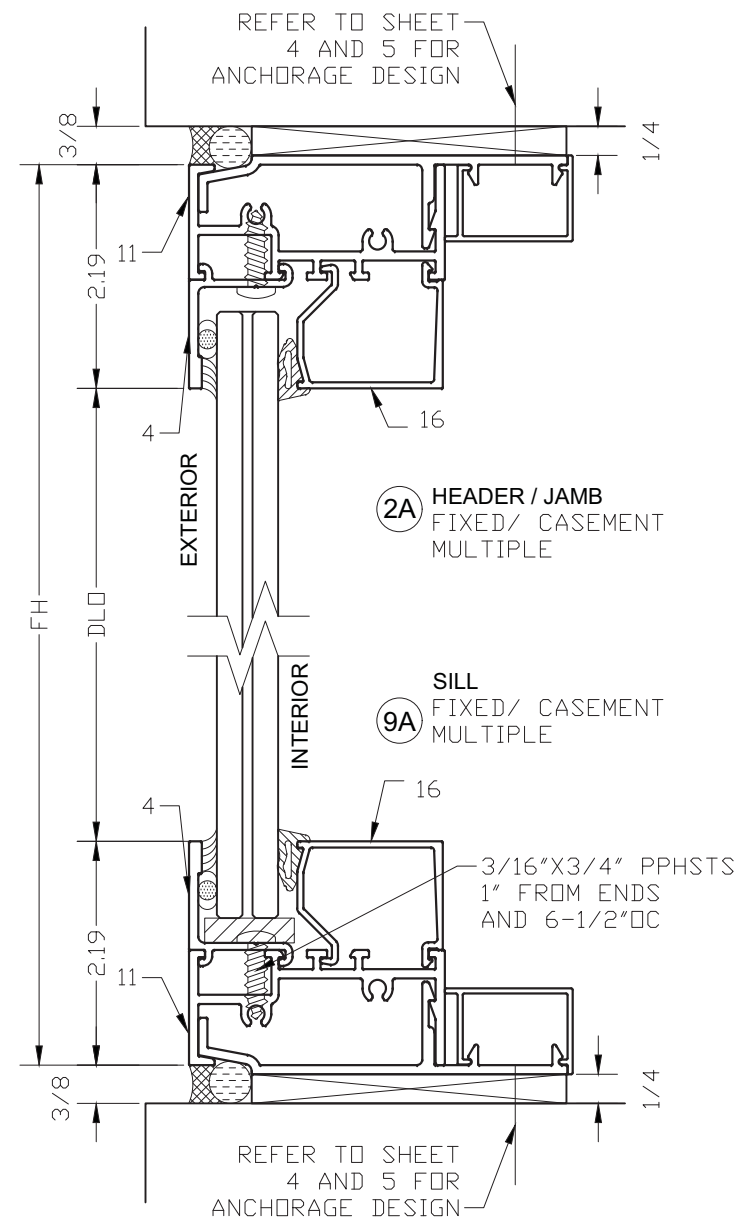
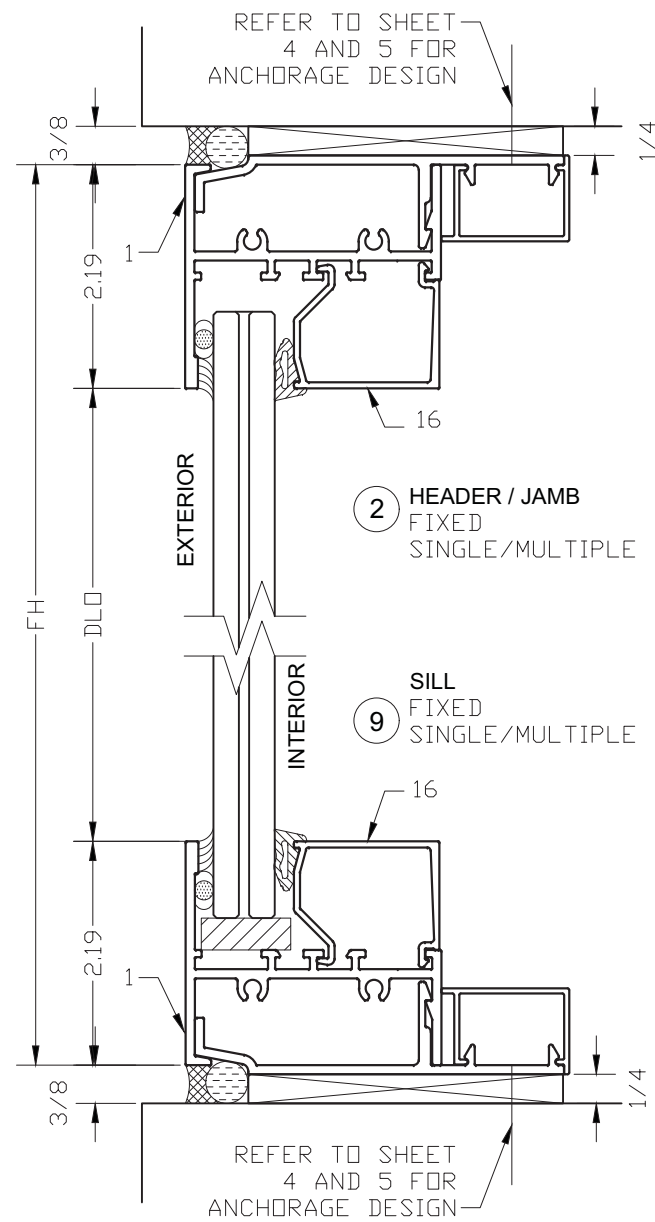
Drawn Date 03/20/2017 Scale AS NOTED

DRAWING NO. AD17-10

FLORIDA APPROVAL
FL #22026.1

Sheet No. 02 OF 07

TYPICAL DETAILS



MCY ENGINEERING, INC.
GLAZING CONSULTANTS

8501 SW 124 Ave. Ste. 205A P: 305.271.0117
MIAMI, FL 33183 F: 305.279.6818

www.MCYEngineering.com MCY.Engineering@Att.net

NRAP SERIES 2500 FIXED WINDOW (L.M.I.)

NR ARCHITECTURAL PRODUCTS

4348 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
TEL: (561) 844-1121 FAX: (561) 844-6131

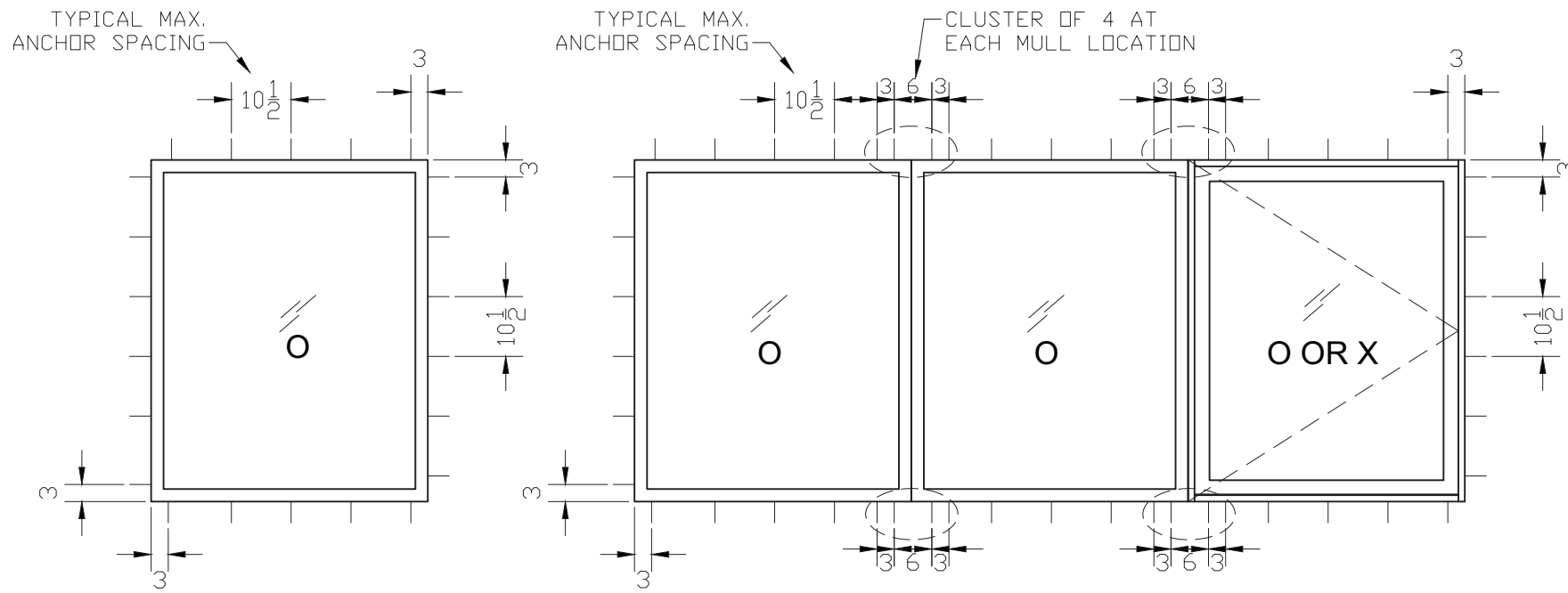
Rev. No.	Date	Drawn By	Description

Drawn Date: 03/20/2017 Scale: AS NOTED

DRAWING NO.: AD17-10

FLORIDA APPROVAL
FL #22026.1

Sheet No.: 03 OF 07



ANCHORAGE LAY-OUT WITH STRAP

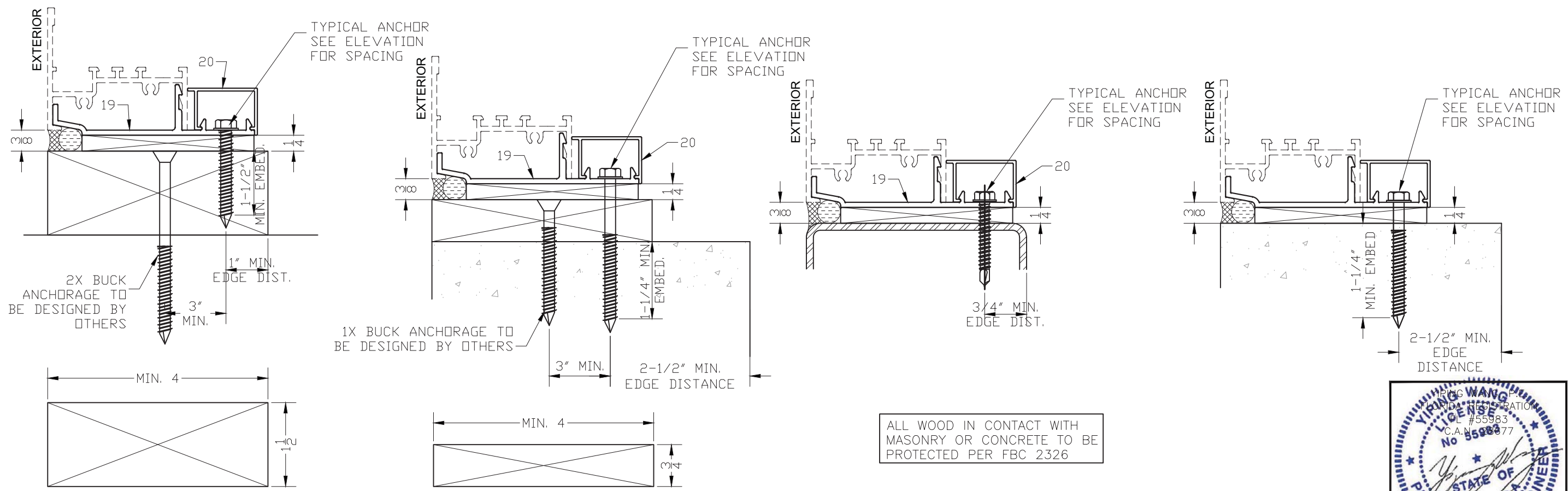
TYPICAL ANCHORS: (SEE ELEVATION FOR SPACING)

TYPE "A": 1/4" TAPCON BY 'ITW' (Fu=120 KSI, Fy=92 KSI)
 1/4" ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
 1-1/2" MIN. EMBED INTO WOOD STRUCTURES (SG=0.55 MIN.)
 OR THRU WOOD BUCK WITH 1-1/4" EMBED INTO MASONRY/CONCRETE

1/4" TAPCON BY 'ITW' (Fu=120 KSI, Fy=92 KSI)
 1/4" ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
 1-1/4" EMBED INTO MASONRY/CONCRETE

TYPE "B": 1/4" DIA. TEKS/SELF-DRILLING SCREW, GRADE 5
 (Fu=100 KSI, Fy=65 KSI)
 INTO METAL STRUCTURES
 STEEL: 1/8" THK. MIN. (Fy=36 KSI)
 ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)

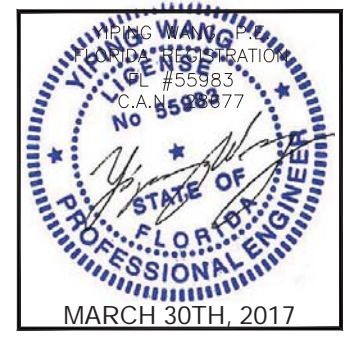
MIN. EDGE DISTANCE:
 INTO CONCRETE = 2-1/2" MIN.
 INTO WOOD = 1" MIN.
 INTO METAL = 3/4" MIN.



ALL WOOD IN CONTACT WITH MASONRY OR CONCRETE TO BE PROTECTED PER FBC 2326

2X PRESSURE TREATED SOUTHERN PINE G>=.55

1X PRESSURE TREATED SOUTHERN PINE G>=.55

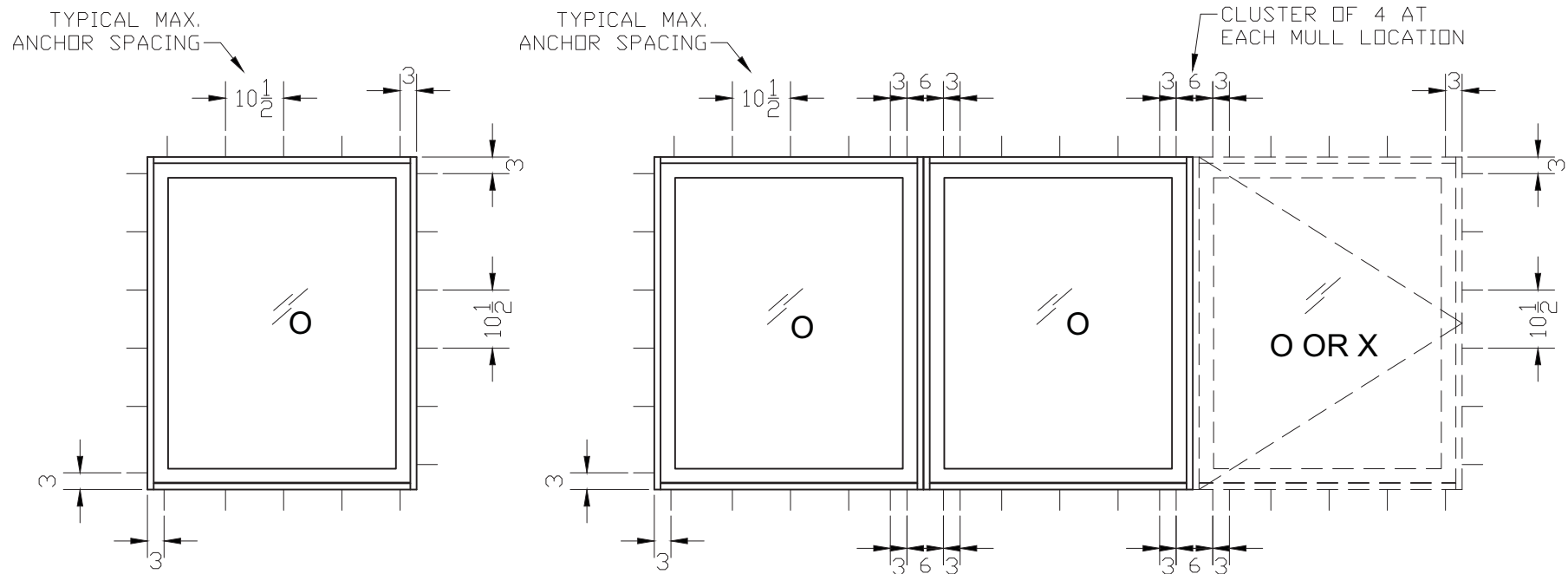


MCY ENGINEERING, INC.
 GLAZING CONSULTANTS
 8501 SW 124 Ave. Ste. 205A P: 305.271.0117
 MIAMI, FL 33183 F: 305.279.6818
 www.MCYEngineering.com MCY.Engineering@Att.net

NRAP SERIES 2500 FIXED WINDOW (L.M.I.)
 NR ARCHITECTURAL PRODUCTS
 4348 WESTROADS DRIVE
 WEST PALM BEACH, FL 33407
 TEL: (561) 844-1121 FAX: (561) 844-6131

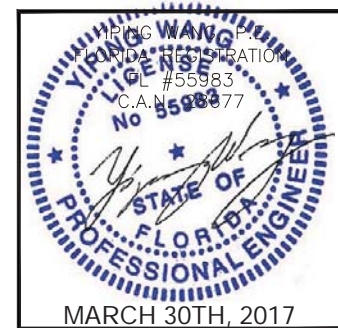
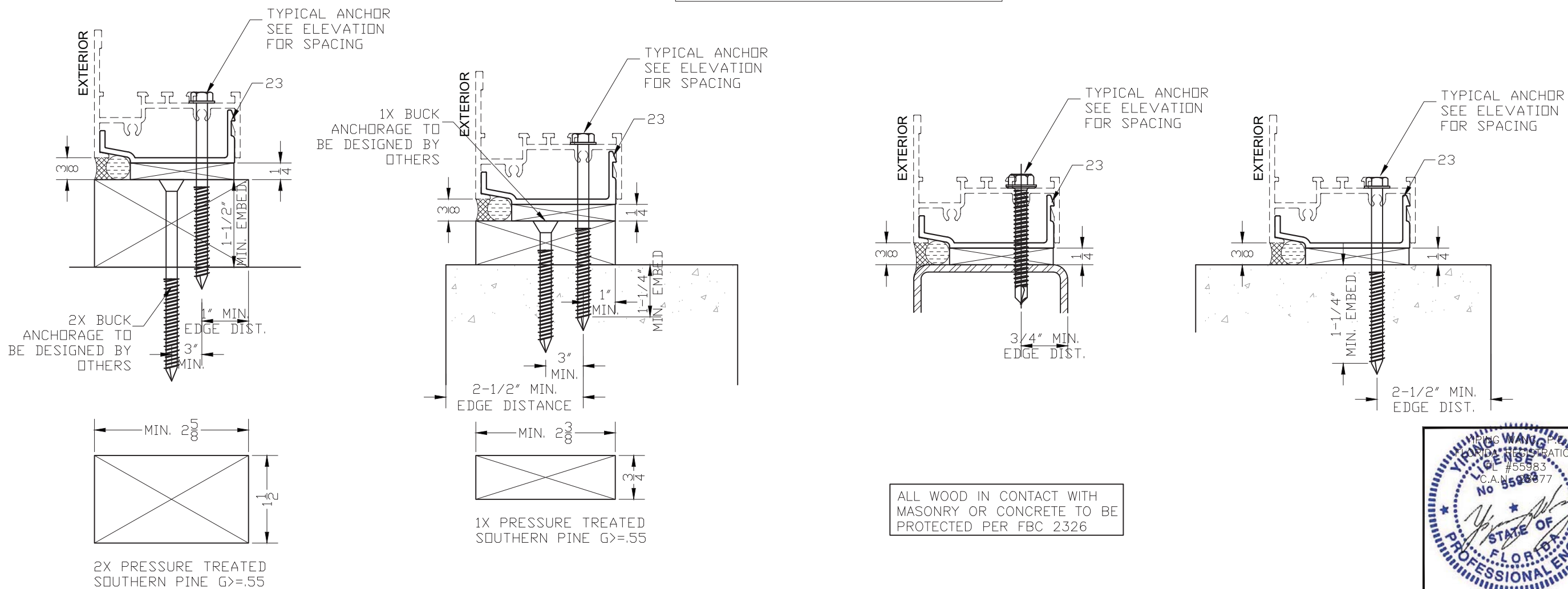
Rev. No.	Date	Drawn By	Description

Drawn Date	Scale
03/20/2017	AS NOTED
DRAWING NO.	
AD17-10	
FLORIDA APPROVAL	
FL #22026.1	
Sheet No.	
04 OF 07	



ANCHORAGE LAY-OUT WITH SHEAR CLIP

FOR ANCHOR TYPES, SEE SHEET 4



MCY ENGINEERING, INC.
GLAZING CONSULTANTS
8501 SW 124 Ave. Ste. 205A P: 305.271.0117
MIAMI, FL 33183 F: 305.279.6818
www.MCYEngineering.com MCY.Engineering@Att.net

NRAP SERIES 2500 FIXED WINDOW (L.M.I.)
NR ARCHITECTURAL PRODUCTS
4348 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
TEL: (561) 844-1121 FAX: (561) 844-6131

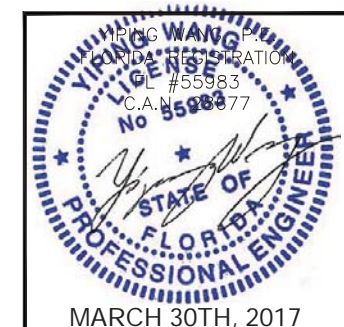
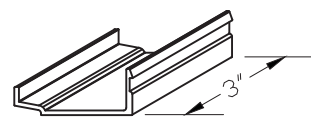
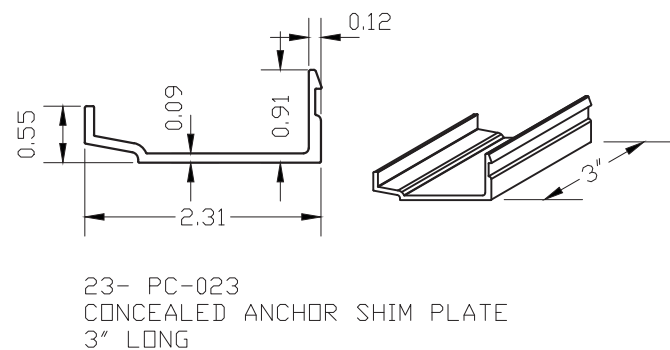
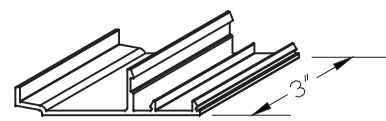
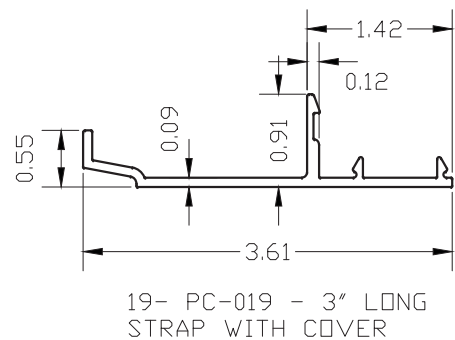
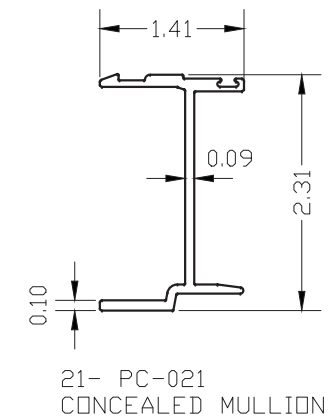
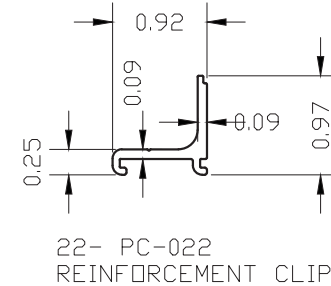
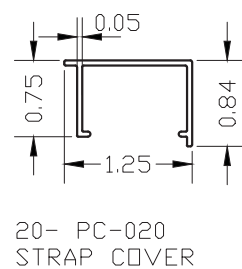
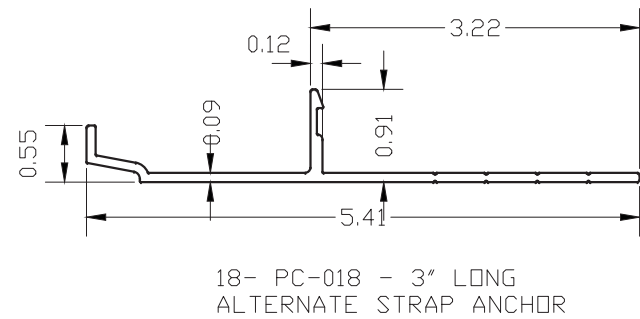
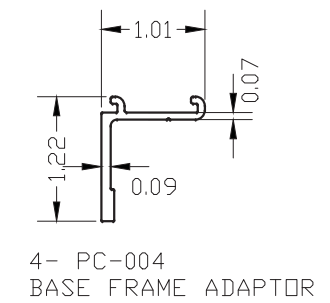
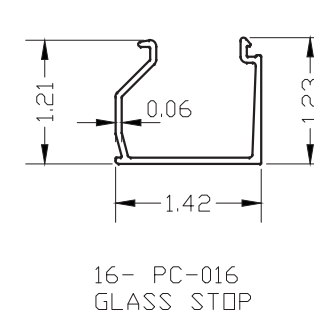
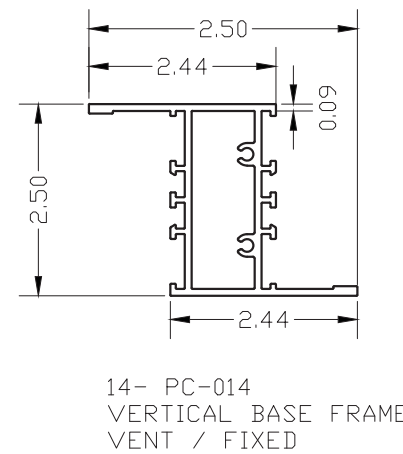
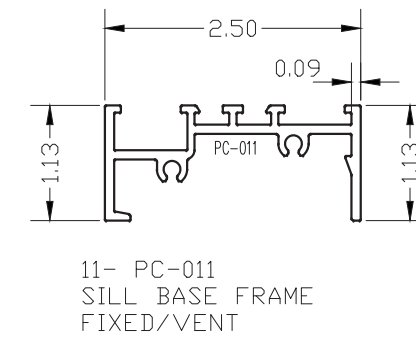
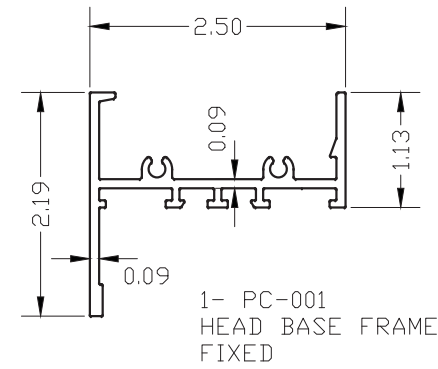
Rev. No.	Date	Drawn By	Description

Drawn Date: 03/20/2017 Scale: AS NOTED
DRAWING NO.: AD17-10
FLORIDA APPROVAL
FL #22026.1
Sheet No.: 05 OF 07

WINDOW COMPONENTS

COMPONENTS LIST

ITEM	PART#	DESCRIPTION	MATERIAL	SUPPLIER
1	PC-001	HEAD BASE FRAME (FIXED)	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
4	PC-004	BASE FRAME ADAPTOR	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
11	PC-011	SILL BASE FRAME (FIXED/OPERABLE)	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
14	PC-014	VERTICAL BASE FRAME (OPERABLE)	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
16	PC-016	GLASS STOP	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
18	PC-018	ALTERNATE STRAP ANCHOR	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
19	PC-019	STRAP ANCHOR	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
20	PC-020	STRAP ANCHOR COVER	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
21	PC-021	CONCEALED MULLION	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
22	PC-022	REINFORCEMENT CLIP	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
23	PC-023	CONCEALED STRAP ANCHOR	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
34	--	9/16" LAMINATED IMPACT GLASS	GLASS	KURARAY AMERICA, INC.
36	NR-A24	VK2526 1/4" PVC SPACER	PVC	CAPITAL TAPE
37	--	GLAZING SEALANT DOW 983 II PART	SILICONE	DOW CORNING
38	--	GLAZING SEALANT DOW 995	SILICONE	DOW CORNING
39	NR-G20	PS 1126E POLY-WEDGE GASKET	70 DURO EPDM	TREMCO
40	NR-G21	EXT. WEATHERSEAL AP 150	EXTRUDED TAPE	SCHLEGEL
41	NR-G22	INT. WEATHERSEAL TLOK 150	POLYETHYLENE	SCHLEGEL
43	NR-G25	GLASS SETTING BLOCK TR-1365E	70 DURO EPDM	TREMCO
44	--	PERIMETER SEALANT DOW 795	SILICONE	DOW CORNING
45	--	FRAME JOINT SEALANT	SILICONE	CRL BUILDING PRODUCTS
46	NR-F12	BASE FRAME FIXING SCREWS	STAINLESS STEEL	#10X1 PPH TSEK SCREW
47	NR-F13	ADAPTOR FIXING SCREW	STAINLESS STEEL	#12 X 3/4" PP TEK SREW
48	NR-EP1	1/16"-2-1/2"X5/16" END PLATE	6063-T6 ALUMINUM	NR ARCHITECTURAL PRODUCTS



NRAP SERIES 2500 FIXED WINDOW (L.M.I.)

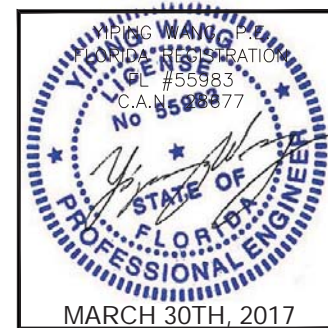
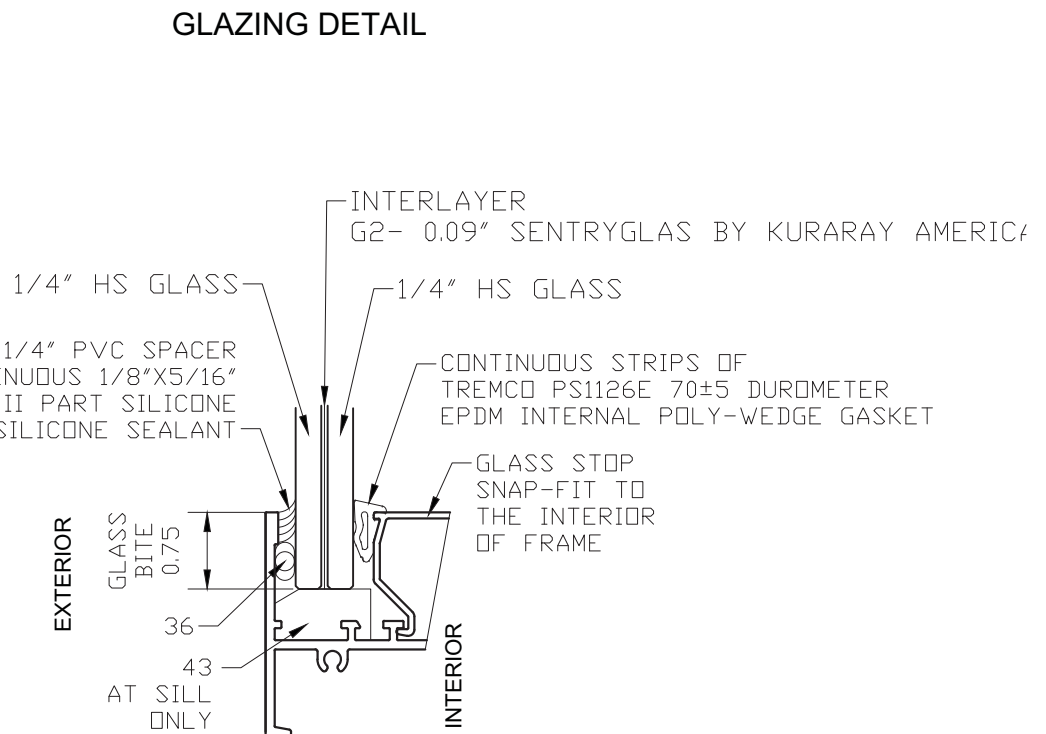
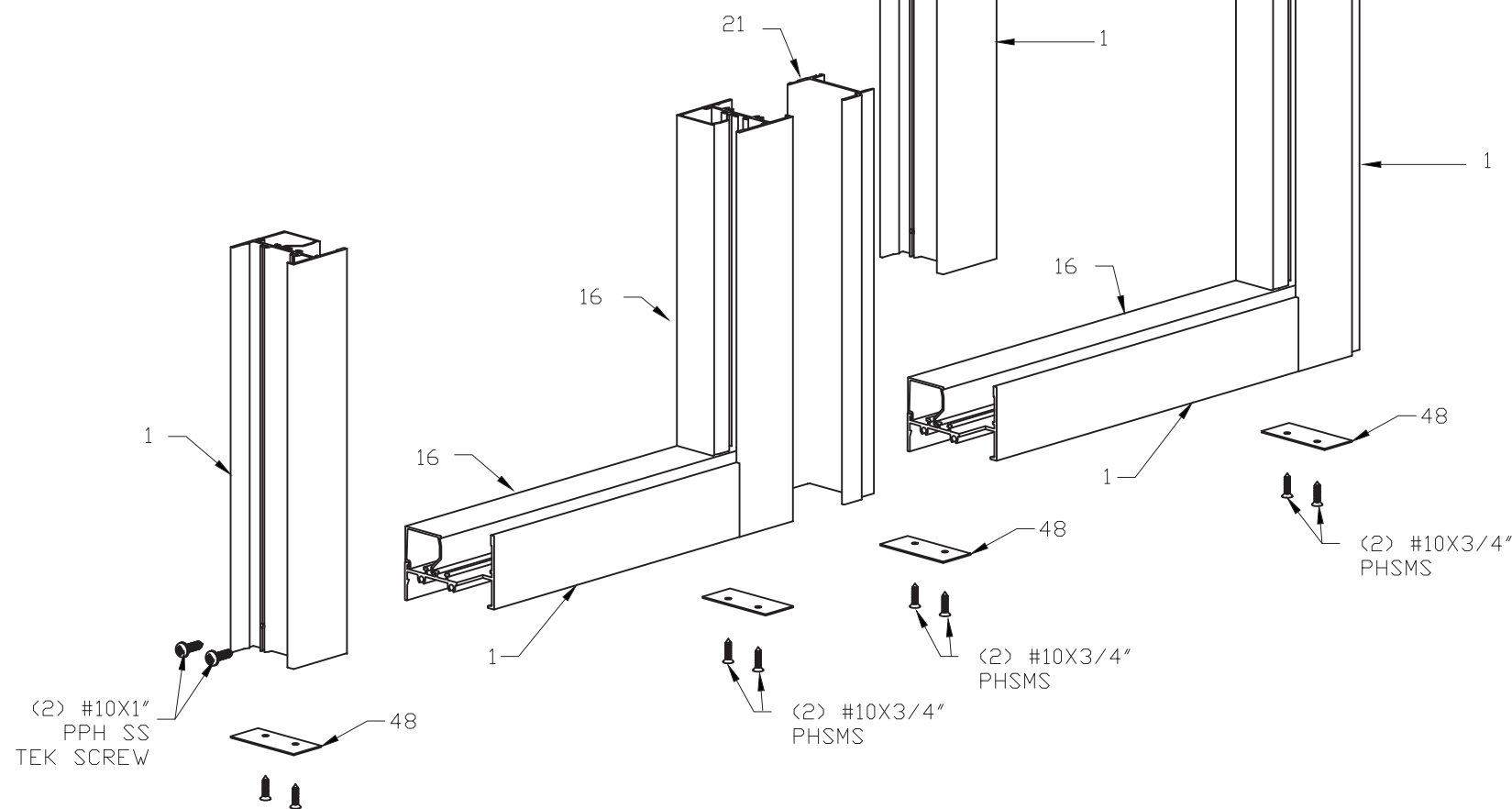
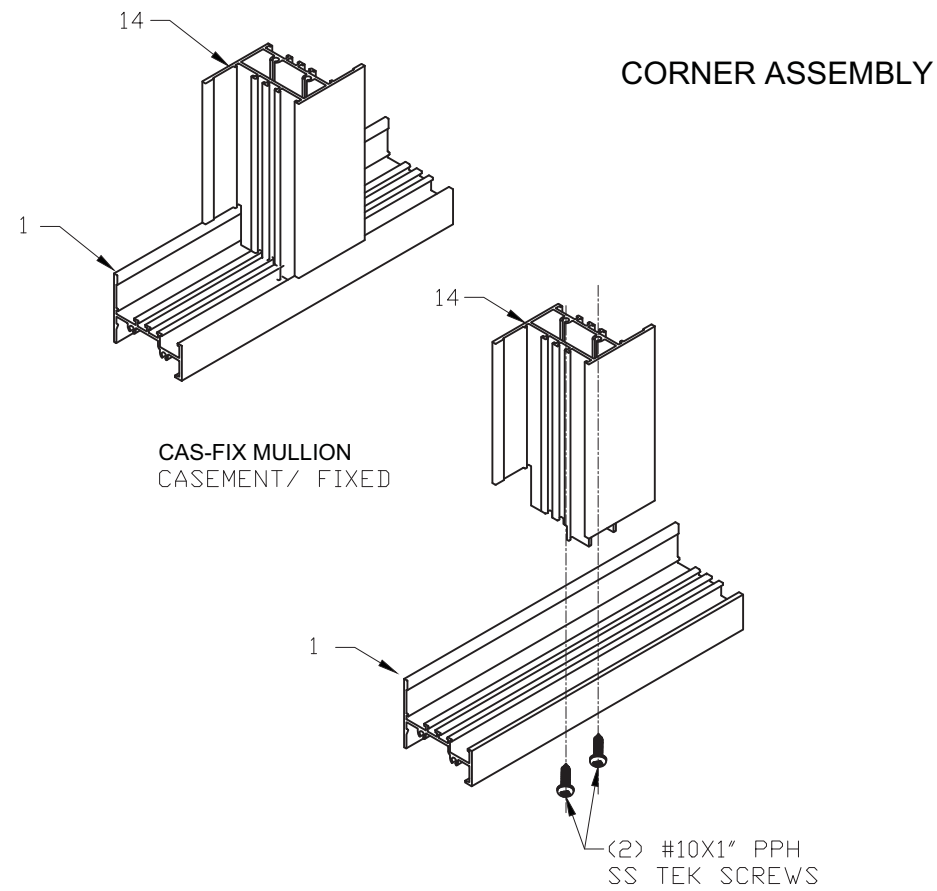
NR ARCHITECTURAL PRODUCTS

4348 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
TEL: (561) 844-1121 FAX: (561) 844-6131

MCY ENGINEERING, INC.
GLAZING CONSULTANTS
8501 SW 124 Ave. Ste. 205A P: 305.271.0117
MIAMI, FL 33183 F: 305.279.6818
www.MCYEngineering.com MCY.Engineering@Att.net

Rev. No.	Date	Drawn By	Description

Drawn Date 03/20/2017	Scale AS NOTED
DRAWING NO. AD17-10	
FLORIDA APPROVAL FL #22026.1	
Sheet No. 06 OF 07	



MCY ENGINEERING, INC.
GLAZING CONSULTANTS

8501 SW 124 Ave. Ste. 205A P: 305.271.0117
MIAMI, FL 33183 F: 305.279.6818

www.MCYEngineering.com MCY.Engineering@Att.net

NRAP SERIES 2500 FIXED WINDOW (L.M.I.)

NR ARCHITECTURAL PRODUCTS

4348 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
TEL: (561) 844-1121 FAX: (561) 844-6131

Rev. No.	Date	Drawn By	Description

Drawn Date: 03/20/2017 Scale: AS NOTED

DRAWING NO.: AD17-10

FLORIDA APPROVAL
FL #22026.1

Sheet No.: 07 OF 07

GENERAL NOTES: FLORIDA BUILDING CODE

1- CODE: THIS PRODUCT HAS BEEN TESTED AND DESIGNED IN ACCORDANCE WITH THE 5TH EDITION FLORIDA BUILDING CODE (2014) INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).

2- DEFINITION: THIS PRODUCT IS A FIXED TYPE WINDOW DESIGNED, CONSTRUCTED AND TESTED TO PROVIDE PROTECTION FROM HURRICANE FORCE WINDS AND WIND BORNE DEBRIS (SMALL MISSILE) WITHIN THE ALLOWABLE DESIGNED PRESSURES AND LIMITATIONS STATED IN THIS APPROVAL. INSTALLATION BELOW 30 FEET ELEVATION IT WILL REQUIRE APPROVED HURRICANE PROTECTION DEVICES.

3- DESIGN LOADS: THE DESIGNED LOADS MUST BE CALCULATED BY A PROFESSIONAL ARCHITECT OR ENGINEER FOR EACH SPECIFIC PROJECT. THE CALCULATED DESIGNED PRESSURE MUST NOT EXCEED THE ALLOWABLE WINDOW PRESSURE.

4- MATERIAL: GLAZING TO BE IMPACT LAMINATED GLASS AS SPECIFIED ON THIS APPROVAL.

5- FASTENERS: ASSEMBLY SCREWS AND ANCHORS SHALL BE AS SPECIFIED IN THE CURRENT SET OF DRAWINGS. INSTALLATION AND LOADS AS PER THIS APPROVAL. ANCHOR QUANTITY & SPACING MUST NOT EXCEED THE MAXIMUM LIMITS SPECIFIED BY THIS APPROVAL.

6- USE: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, ARCHITECT OR ENGINEER OF RECORD TO VERIFY THE FOLLOWING:

6.1- THE STABILITY OF THE STRUCTURE WHERE THE PRODUCT IS TO BE ATTACHED INSURING PROPER ANCHORAGE.

6.2- THE SITE SPECIFIC PROJECT CRITERIA, SUCH AS BUT NOT LIMITED TO, LOCAL CODE REQUIREMENTS, DESIGNED PRESSURES ETC.

6.3- THAT THIS APPROVAL IS ADEQUATE TO THE SPECIFIC PROJECT.

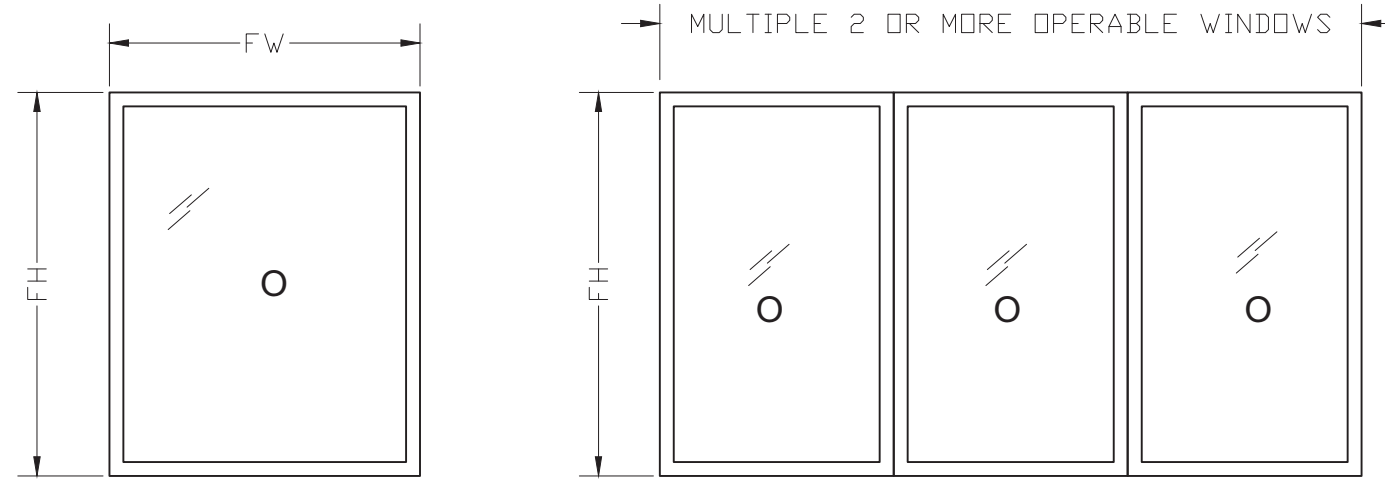
7- 33 1/3% INCREASE IN ALLOWABLE LOADS HAVE NOT BEEN USED IN THE DESIGN OF THE ANCHORS FOR THIS PRODUCT APPROVAL, HOWEVER, WOOD SCREWS WITH 1.6 INCREASE FOR WIND LOAD DURATION HAVE BEEN USED.

8- DISSIMILAR MATERIALS: MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL, THAT COME IN CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 5TH EDITION FLORIDA BUILDING CODE (2014).

**FOR ALLOWABLE SIZES AND PRESSURES REFER TO:
SHEET 2**

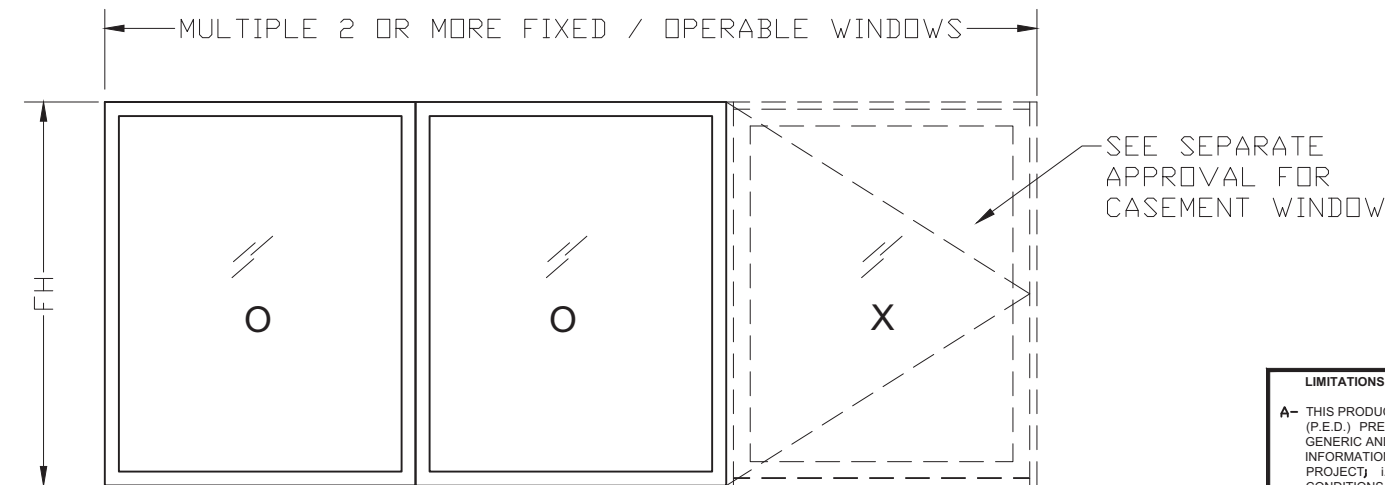
**PRODUCT NOT TO BE INSTALLED BELOW 30 FEET ELEVATION
WITHOUT HURRICANE PROTECTION DEVICES**

**TYPICAL ELEVATIONS
VIEW FROM OUTSIDE**



<O> SINGLE
FIXED WINDOW
SEE SHEET 2 FOR RATING

<OO, OOO, OOOO>
MULTIPLE FIXED WINDOWS
SEE SHEET 2 FOR RATING



<XO, XOX, OXO, OXXOX>
MULTIPLE COMBINATION OF CASEMENT OUT AND FIXED WINDOWS
SEE SHEET 2 FOR RATING

TABLE OF CONTENTS:

SHEET	DESCRIPTION
1 of 7	GENERAL NOTES, INDEX AND TYPICAL ELEVATIONS
2 of 7	TABLE 1 & 2 DESIGN RATING FOR SINGLE AND MULTIPLES UNITS
3 of 7	TYPICAL DETAILS
4 of 7	ANCHORAGE LAY-OUT WITH STRAPS
5 of 7	ANCHORAGE LAY-OUT WITH SHEAR CLIP
6 of 7	WINDOW COMPONENTS AND BILL OF MATERIAL
7 of 7	GLAZING DETAILS & CORNER ASSEMBLY

LIMITATIONS OF USE

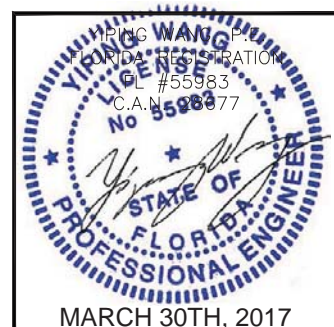
A- THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT. I.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.E.D.

B- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.

C- THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.

D- SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D.

E- THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.



MCY ENGINEERING, INC.
GLAZING CONSULTANTS
8501 SW 124 Ave. Ste. 205A P: 305.271.0117
MIAMI, FL 33183 F: 305.279.6818
www.MCYEngineering.com MCY.Engineering@Att.net

NRAP SERIES 2500 FIXED WINDOW (S.M.I.)
NR ARCHITECTURAL PRODUCTS
4348 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
TEL: (561) 844-1121 FAX: (561) 844-6131

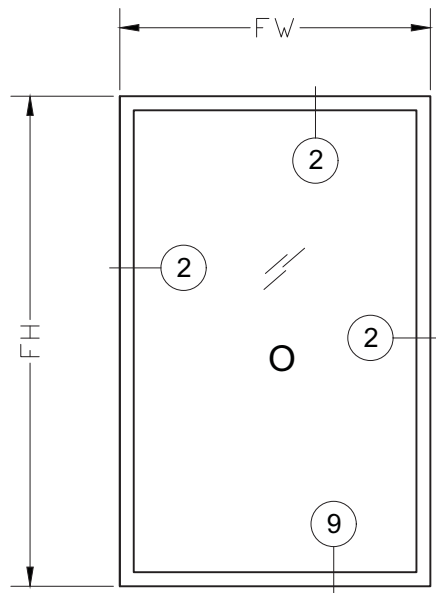
Rev. No.	Date	Drawn By	Description

Drawn Date: 03/20/2017 Scale: AS NOTED
DRAWING NO.: AD17-11
FLORIDA APPROVAL
FL #22026.2
Sheet No.: 01 OF 07

**TABLE 1
DESIGNED RATING FOR
SINGLE FIXED UNITS (PSF)**

MAX. FRAME		PRESSURES	
WIDTH (FW)	HEIGHT (FH)	EXT (+)	INT (-)
24	96	120	
32	72	120	
38.75	60	120	
44	52	120	
48	48	120	
52	44	120	
60	38.75	120	
72	32	120	
96	24	120	

* FRAME WIDTH AND HEIGHT
IN INCHES
* PRESSURES IN PSF
* WINDOW AREA MUST NOT
EXCEED 16.15 SQFT
DL0=FW-4.375 OR FH-4.375

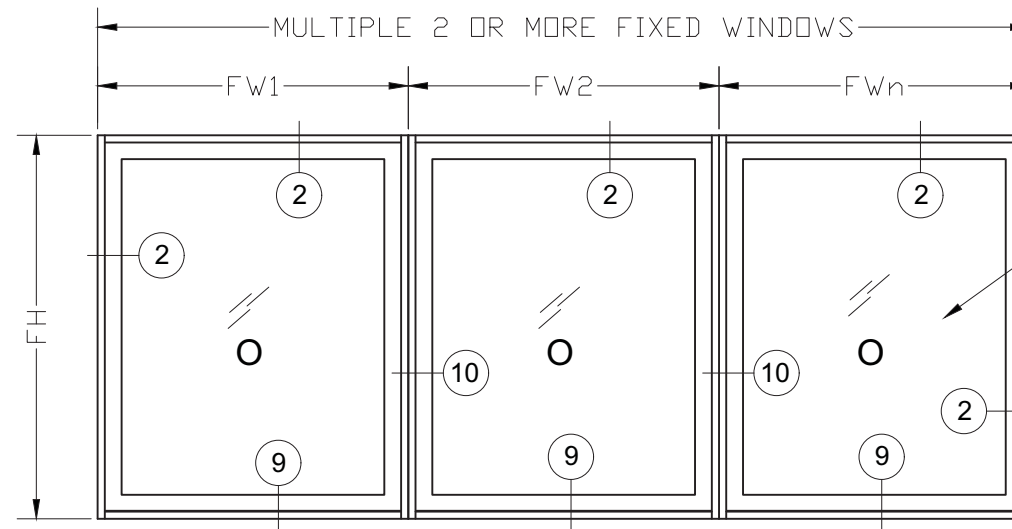


(O) SINGLE
FIXED WINDOW

**TABLE 2
DESIGNED RATING FOR MULLIONS
ON MULTIPLE FIXED OR/AND
FIXED/CASEMENT UNITS (PSF)**

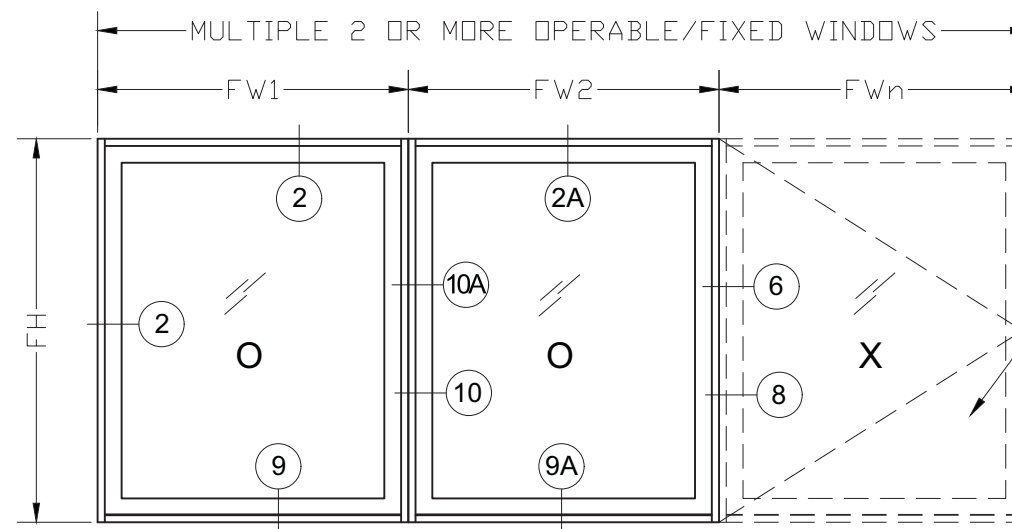
TM	FH	MULL TYPE	
		6/ 8/ 10/ 10A EXT(+)	INT(-)
24	60	120	
32	60	120	
38.75	60	120	
44	52	120	
48	48	120	
54	43	120	
60	39	120	
66	35	120	
72	32	120	

TM- MAXIMUM TRIBUTARY
MODULE WIDTH IN INCHES
FH- MAXIMUM FINISHED HEIGHT
IN INCHES
PRESSURES IN PSF
DL0=FW-4.375 OR FH-4.375



$$TM = (FW1 + FW2) / 2$$

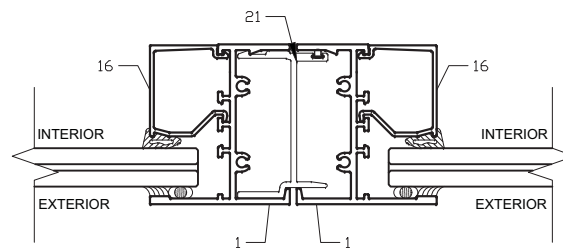
ALLOWABLE PRESSURE
BASED ON THE MIN.
PRESSURE FROM
TABLE 1 & 2



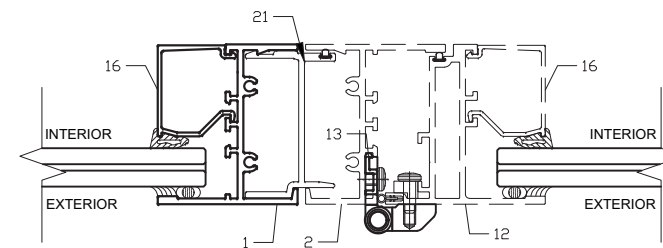
$$TM = (FW1 + FW2) / 2$$

ALLOWABLE PRESSURE
BASED ON THE MIN.
PRESSURE FROM
TABLE 1, 2 AND
CASEMENT WINDOW
APPROVAL.

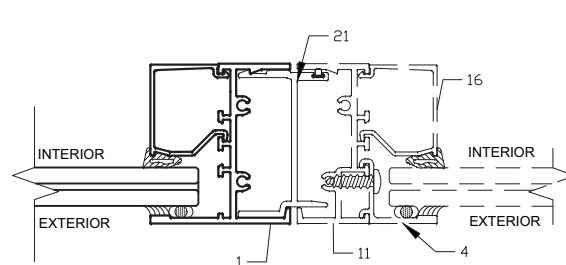
10 STACK MULLION
FIXED/ FIXED



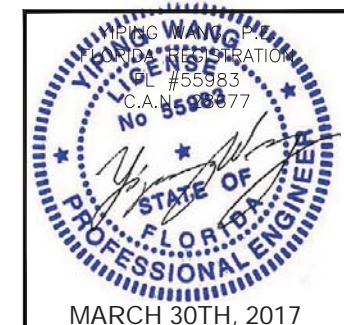
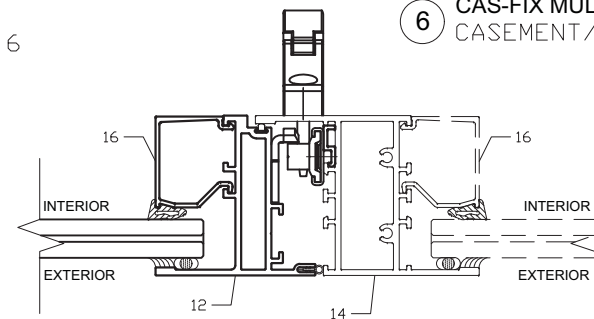
8 STACK MULLION
FIXED/ CASEMENT



10A STACK MULLION
CASEMENT/ FIXED
WHEN COMBINED WITH MULL 6



6 CAS-FIX MULLION
CASEMENT/ FIXED



NRAP SERIES 2500 FIXED WINDOW (S.M.I.)

NR ARCHITECTURAL PRODUCTS

4348 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
TEL: (561) 844-1121 FAX: (561) 844-6131

MCY ENGINEERING, INC.
GLAZING CONSULTANTS
8501 SW 124 Ave. Ste. 205A P: 305.271.0117
MIAMI, FL 33183 F: 305.279.6818
www.MCYEngineering.com MCY.Engineering@Att.net

Rev. No.	Date	Drawn By	Description

Drawn Date 03/20/2017 Scale AS NOTED

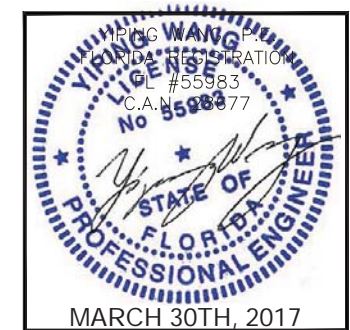
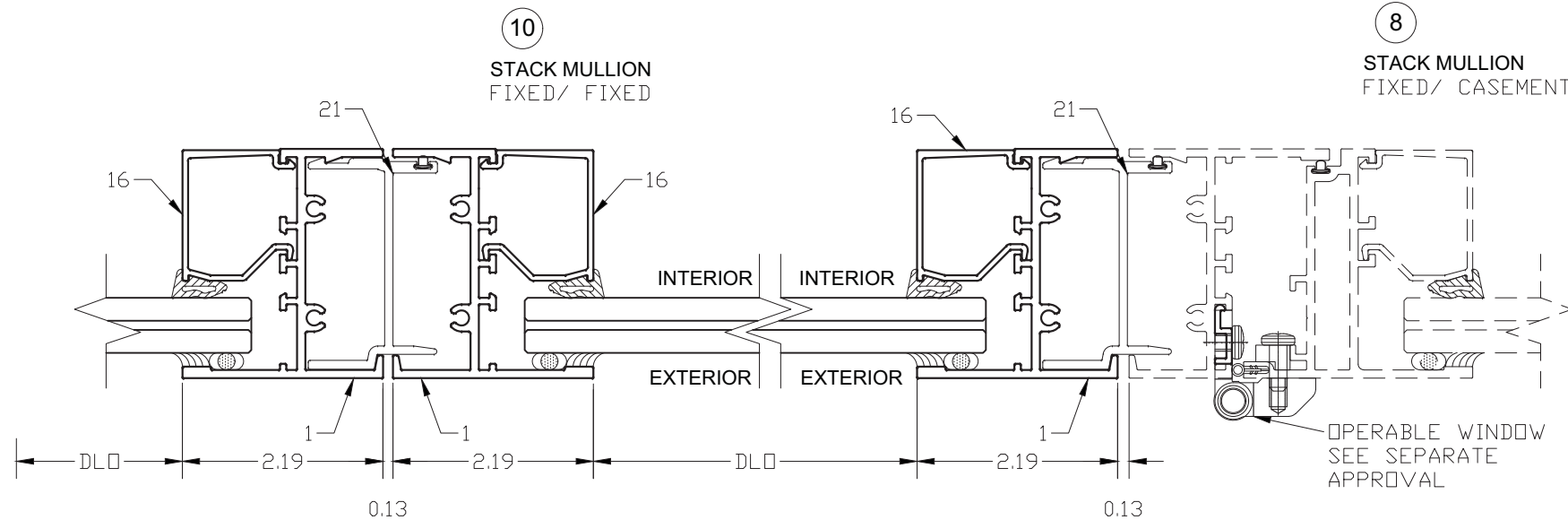
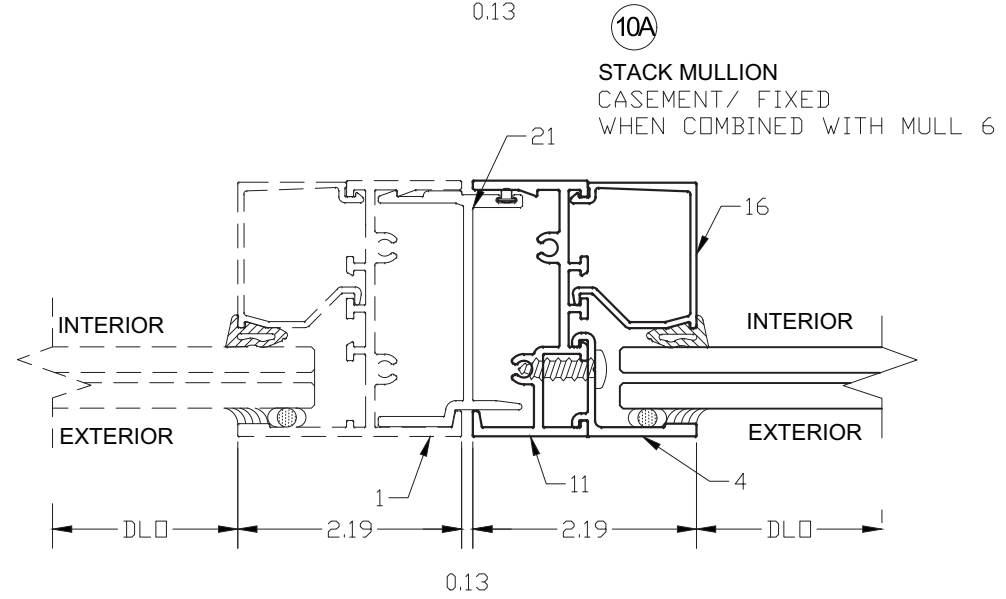
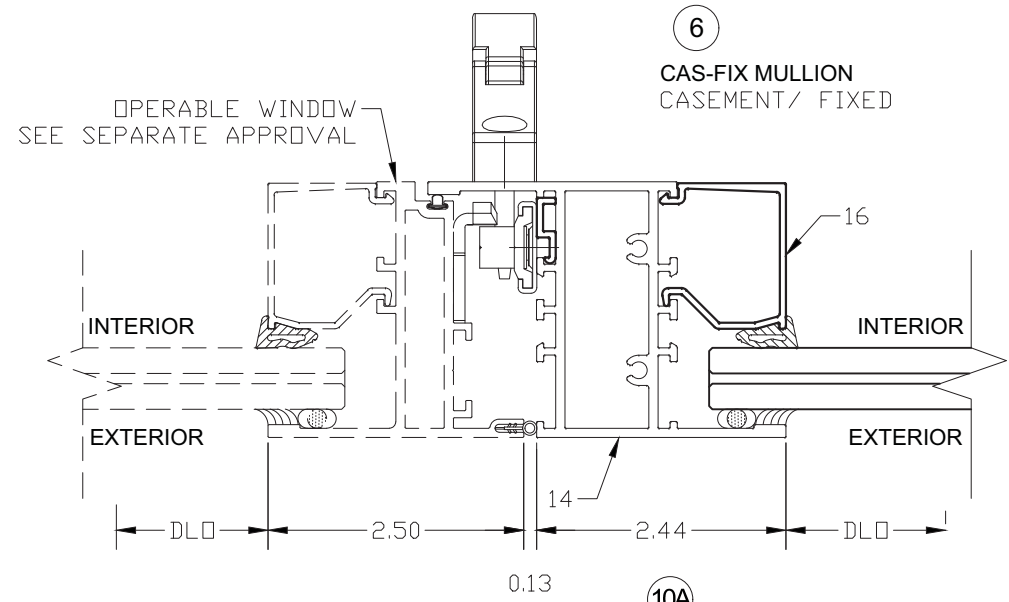
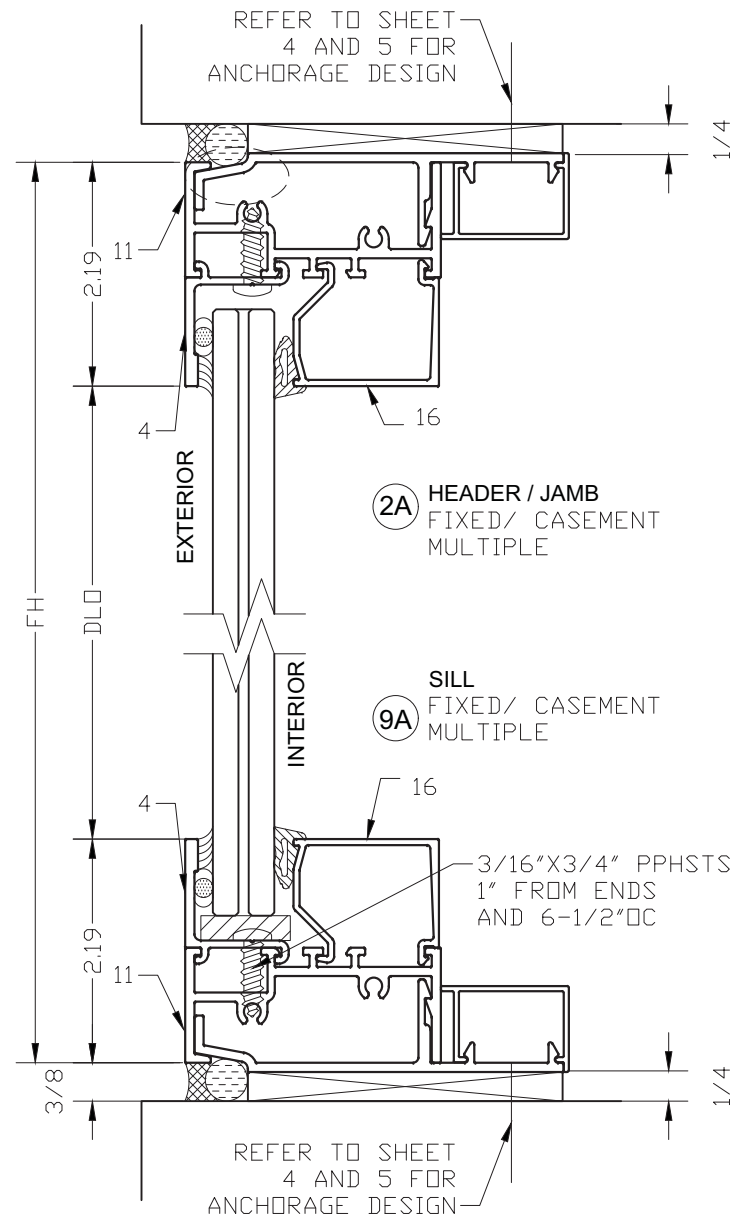
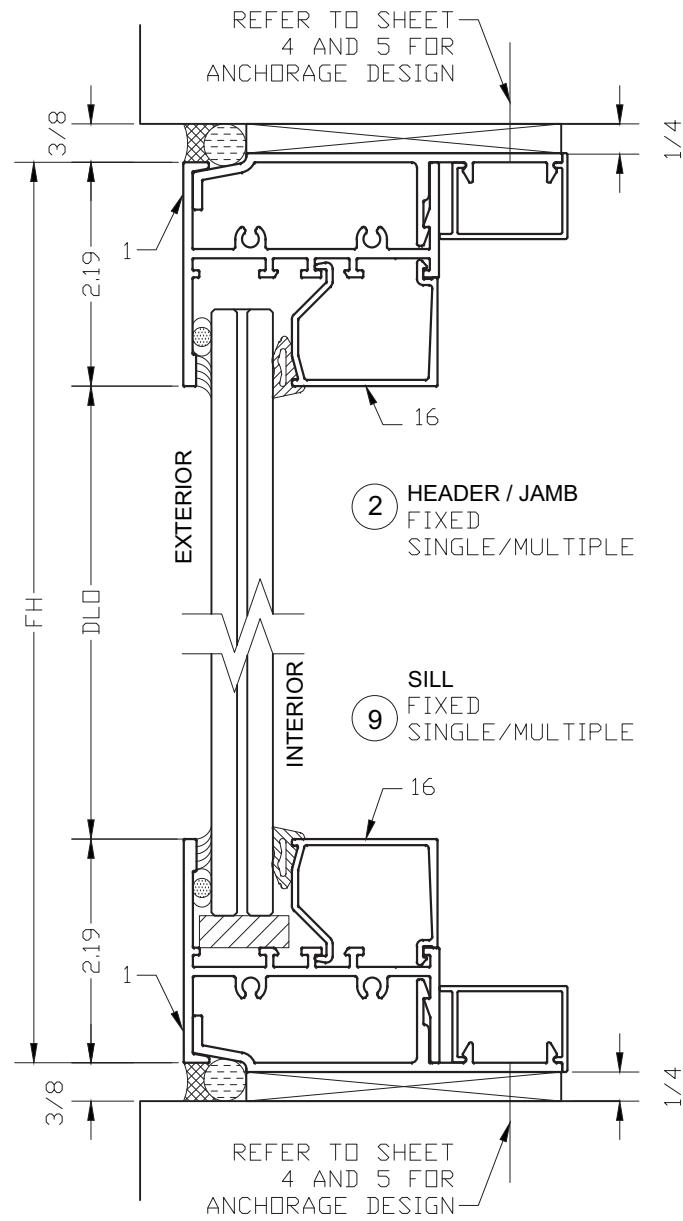
DRAWING NO. AD17-11

FLORIDA APPROVAL

FL #22026.2

Sheet No. 02 OF 07

TYPICAL DETAILS

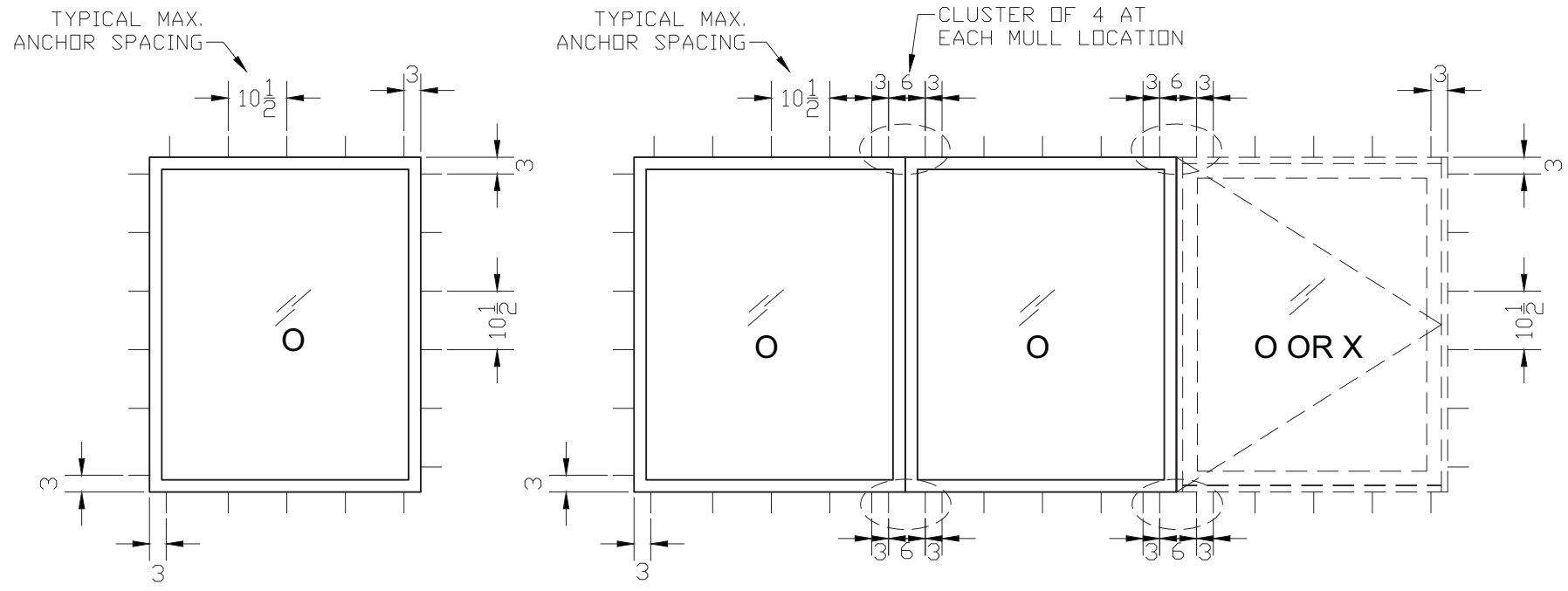


MCY ENGINEERING, INC.
GLAZING CONSULTANTS
8501 SW 124 Ave. Ste. 205A P: 305.271.0117
MIAMI, FL 33183 F: 305.279.6818
www.MCYEngineering.com MCY.Engineering@Att.net

NRAP SERIES 2500 FIXED WINDOW (S.M.I.)
NR ARCHITECTURAL PRODUCTS
4348 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
TEL: (561) 844-1121 FAX: (561) 844-6131

Rev. No.	Date	Drawn By	Description

Drawn Date: 03/20/2017 Scale: AS NOTED
DRAWING NO.: AD17-11
FLORIDA APPROVAL: FL #22026.2
Sheet No.: 03 OF 07



ANCHORAGE LAY-OUT WITH STRAP

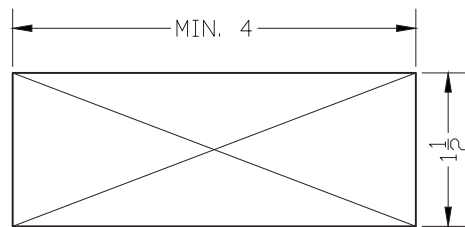
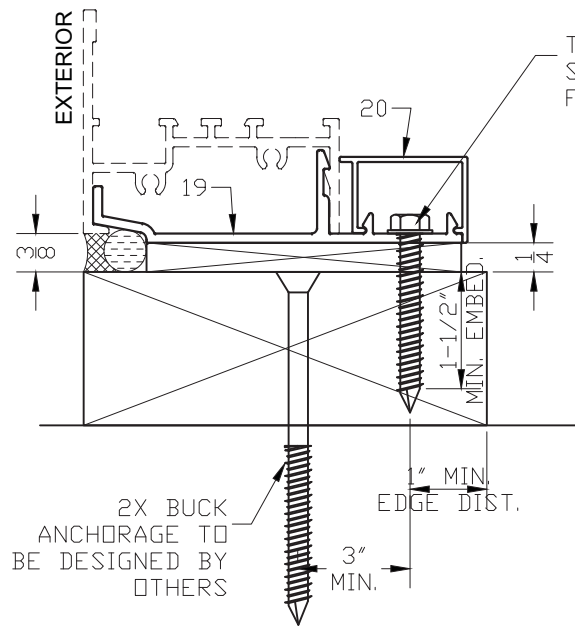
TYPICAL ANCHORS: (SEE ELEVATION FOR SPACING)

TYPE "A": 1/4" TAPCON BY 'ITW' (Fu=120 KSI, Fy=92 KSI)
 1/4" ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
 1-1/2" MIN. EMBED INTO WOOD STRUCTURES (SG=0.55 MIN.)
 OR THRU WOOD BUCK WITH 1-1/4" EMBED INTO
 MASONRY/CONCRETE

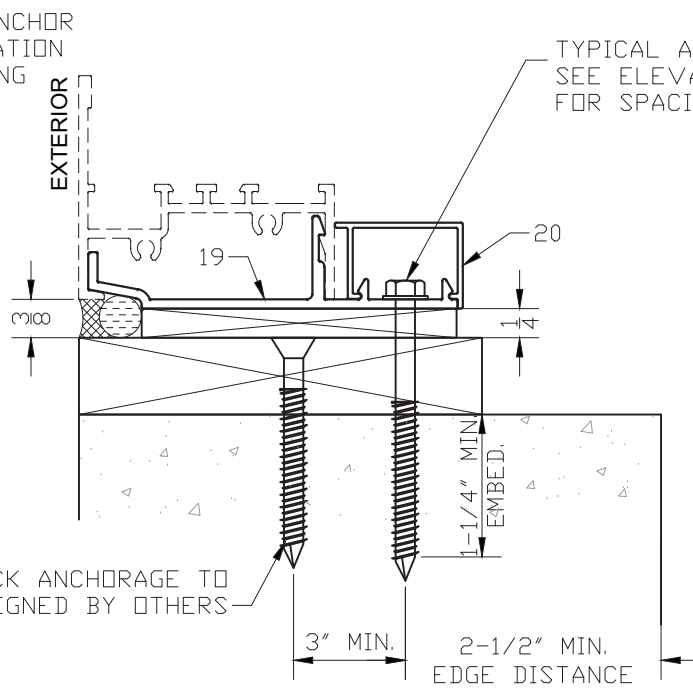
1/4" TAPCON BY 'ITW' (Fu=120 KSI, Fy=92 KSI)
 1/4" ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
 1-1/4" EMBED INTO MASONRY/CONCRETE

TYPE "B": 1/4" DIA. TEKS/SELF-DRILLING SCREW, GRADE 5
 (Fu=100 KSI, Fy=65 KSI)
 INTO METAL STRUCTURES
 STEEL: 1/8" THK. MIN. (Fy=36 KSI)
 ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)

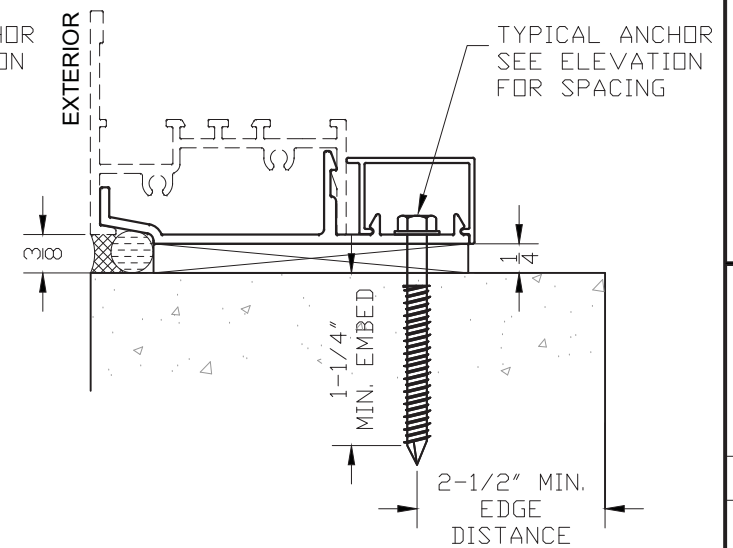
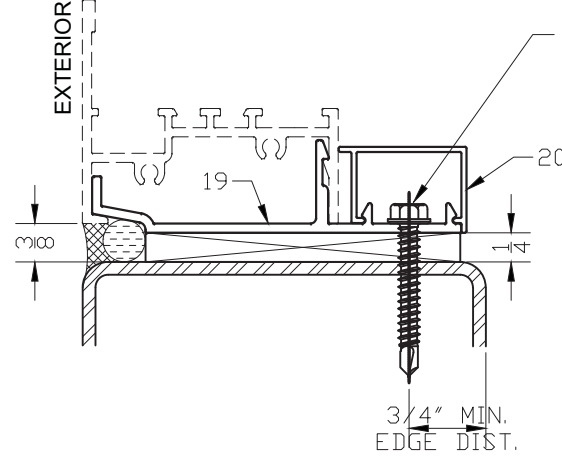
MIN. EDGE DISTANCE:
 INTO CONCRETE = 2-1/2" MIN.
 INTO WOOD = 1" MIN.
 INTO METAL = 3/4" MIN.



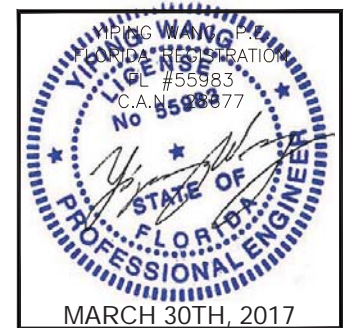
2X PRESSURE TREATED SOUTHERN PINE G>=0.55



1X PRESSURE TREATED SOUTHERN PINE G>=0.55



ALL WOOD IN CONTACT WITH MASONRY OR CONCRETE TO BE PROTECTED PER FBC 2326

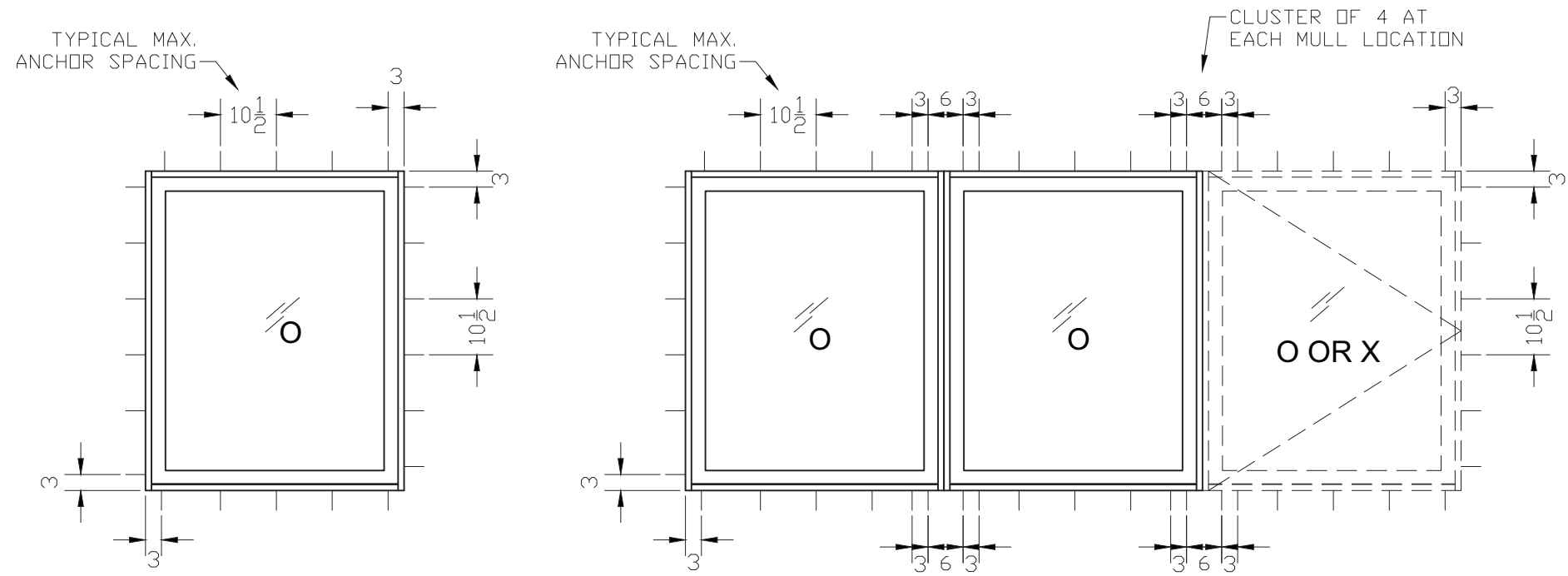


MCY ENGINEERING, INC.
 GLAZING CONSULTANTS
 8501 SW 124 Ave. Ste. 205A P: 305.271.0117
 MIAMI, FL 33183 F: 305.279.6818
 www.MCYEngineering.com MCY.Engineering@Att.net

NRAP SERIES 2500 FIXED WINDOW (S.M.I.)
NR ARCHITECTURAL PRODUCTS
 4348 WESTROADS DRIVE
 WEST PALM BEACH, FL 33407
 TEL: (561) 844-1121 FAX: (561) 844-6131

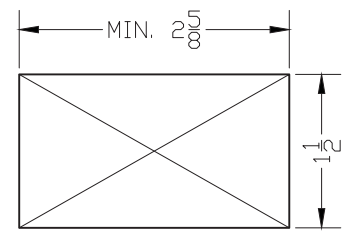
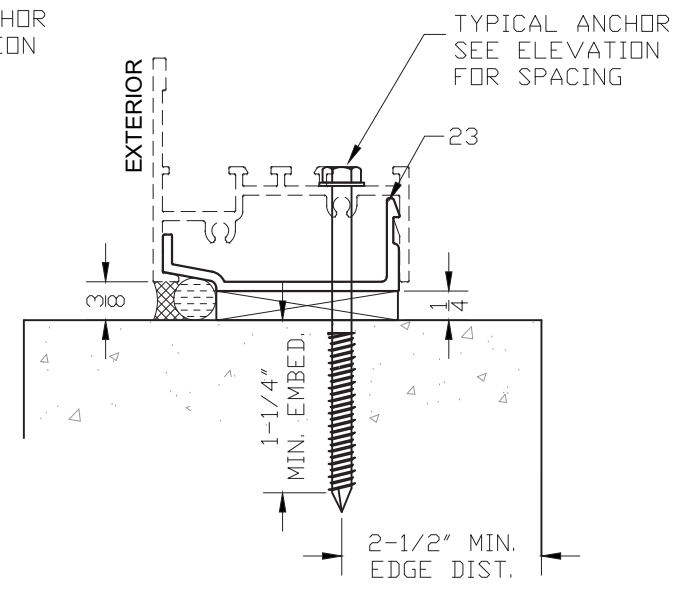
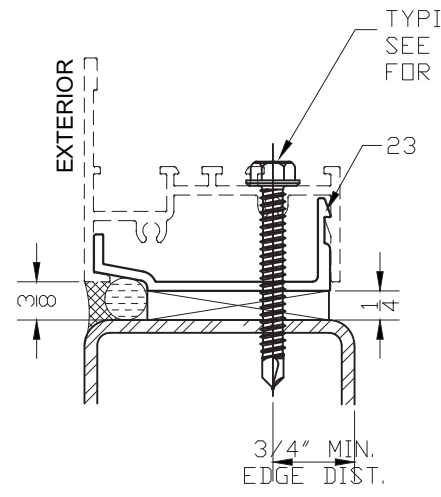
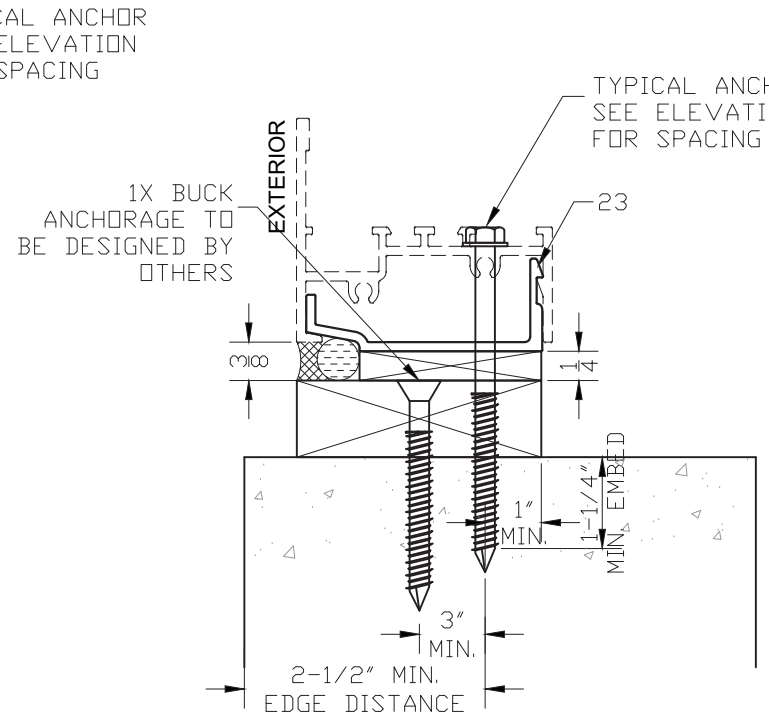
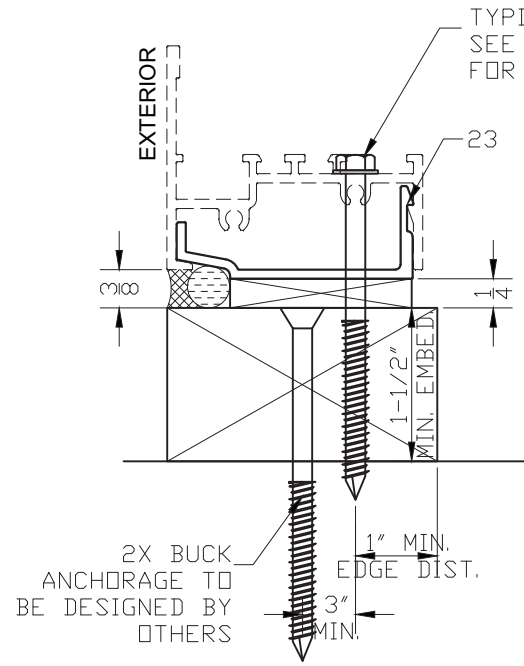
Rev. No.	Date	Drawn By	Description

Drawn Date: 03/20/2017 Scale: AS NOTED
 DRAWING NO.: AD17-11
 FLORIDA APPROVAL
 FL #22026.2
 Sheet No.: 04 OF 07

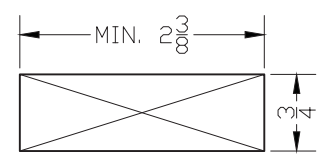


ANCHORAGE LAY-OUT WITH SHEAR CLIP

FOR ANCHOR TYPES, SEE SHEET 4

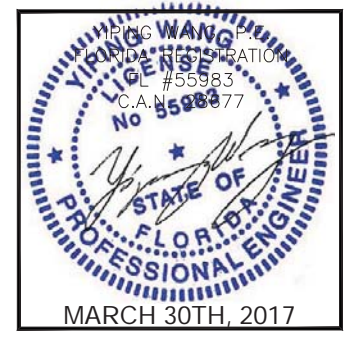


2X PRESSURE TREATED SOUTHERN PINE G>=55



1X PRESSURE TREATED SOUTHERN PINE G>=55

ALL WOOD IN CONTACT WITH MASONRY OR CONCRETE TO BE PROTECTED PER FBC 2326



MCY ENGINEERING, INC.
GLAZING CONSULTANTS
8501 SW 124 Ave. Ste. 205A P: 305.271.0117
MIAMI, FL 33183 F: 305.279.6818
www.MCYEngineering.com MCY.Engineering@Att.net

NRAP SERIES 2500 FIXED WINDOW (S.M.I.)
NR ARCHITECTURAL PRODUCTS
4348 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
TEL: (561) 844-1121 FAX: (561) 844-6131

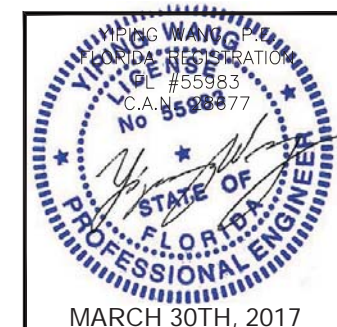
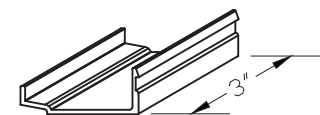
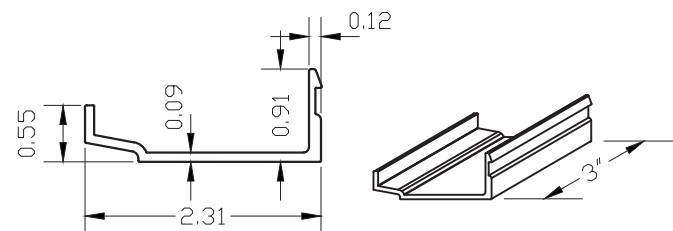
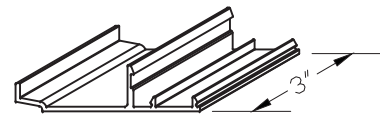
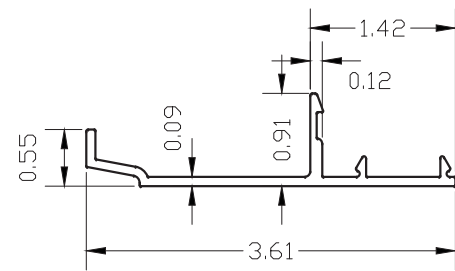
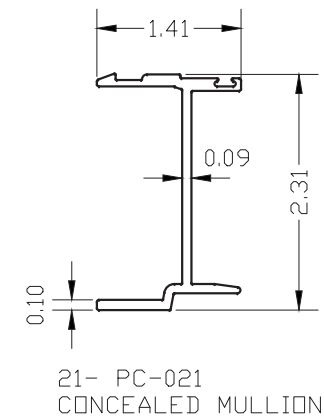
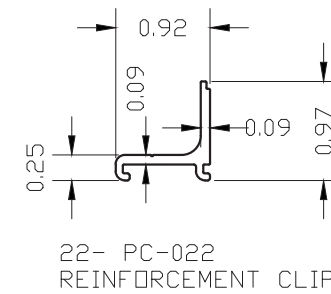
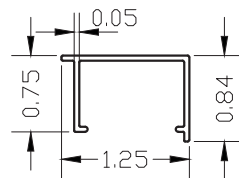
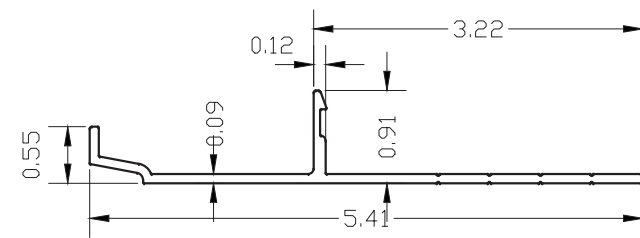
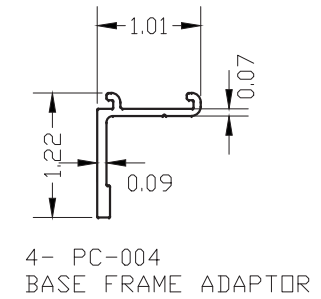
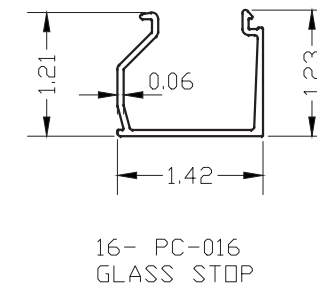
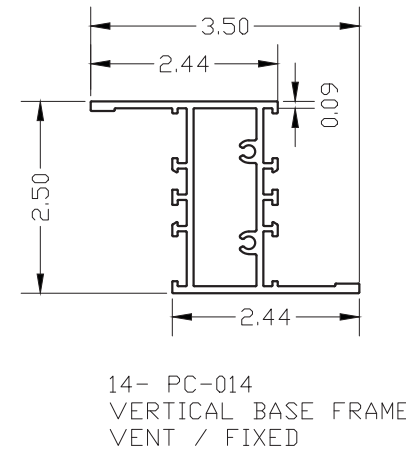
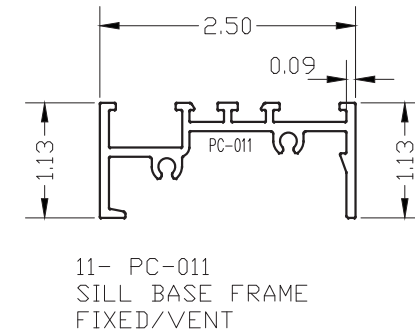
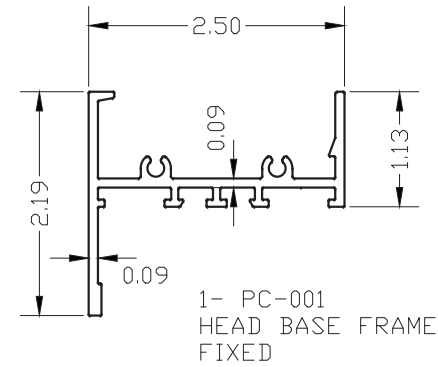
Rev. No.	Date	Drawn By	Description

Drawn Date 03/20/2017 Scale AS NOTED
DRAWING NO. AD17-11
FLORIDA APPROVAL
FL #22026.2
Sheet No. 05 OF 07

WINDOW COMPONENTS

COMPONENTS LIST

ITEM	PART#	DESCRIPTION	MATERIAL	SUPPLIER
1	PC-001	HEAD BASE FRAME (FIXED)	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
4	PC-004	BASE FRAME ADAPTOR	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
11	PC-011	SILL BASE FRAME (FIXED/OPERABLE)	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
14	PC-014	VERTICAL BASE FRAME (OPERABLE)	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
16	PC-016	GLASS STOP	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
18	PC-018	ALTERNATE STRAP ANCHOR	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
19	PC-019	STRAP ANCHOR	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
20	PC-020	STRAP ANCHOR COVER	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
21	PC-021	CONCEALED MULLION	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
22	PC-022	REINFORCEMENT CLIP	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
23	PC-023	CONCEALED STRAP ANCHOR	ALUMINUM 6063-T6	NR ARCHITECTURAL PRODUCTS
34	--	9/16" LAMINATED IMPACT GLASS	GLASS	DUPONT
36	NR-A24	VK2526 1/4" PVC SPACER	PVC	CAPITAL TAPE
37	--	GLAZING SEALANT DOW 983 II PART	SILICONE	DOW CORNING
38	--	GLAZING SEALANT DOW 995	SILICONE	DOW CORNING
39	NR-G20	PS 1126E POLY-WEDGE GASKET	70 DURO EPDM	TREMCO
40	NR-G21	EXT. WEATHERSEAL AP 150	EXTRUDED TAPE	SCHLEGEL
41	NR-G22	INT. WEATHERSEAL TLOK 150	POLYETHYLENE	SCHLEGEL
43	NR-G25	GLASS SETTING BLOCK TR-1365E	70 DURO EPDM	TREMCO
44	--	PERIMETER SEALANT DOW 795	SILICONE	DOW CORNING
45	--	FRAME JOINT SEALANT	SILICONE	CRL BUILDING PRODUCTS
46	NR-F12	BASE FRAME FIXING SCREWS	STAINLESS STEEL	#10X1 PPH TSEK SCREW
47	NR-F13	ADAPTOR FIXING SCREW	STAINLESS STEEL	#12 X 3/4" PP TEK SREW
48	NR-EP1	1/16"-2-1/2"x5/16" END PLATE	6063-T6 ALUMINUM	NR ARCHITECTURAL PRODUCTS

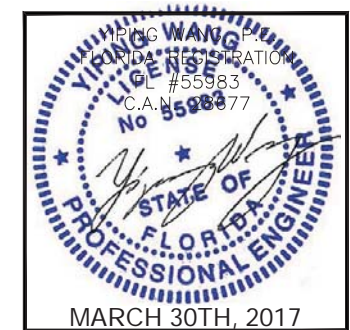
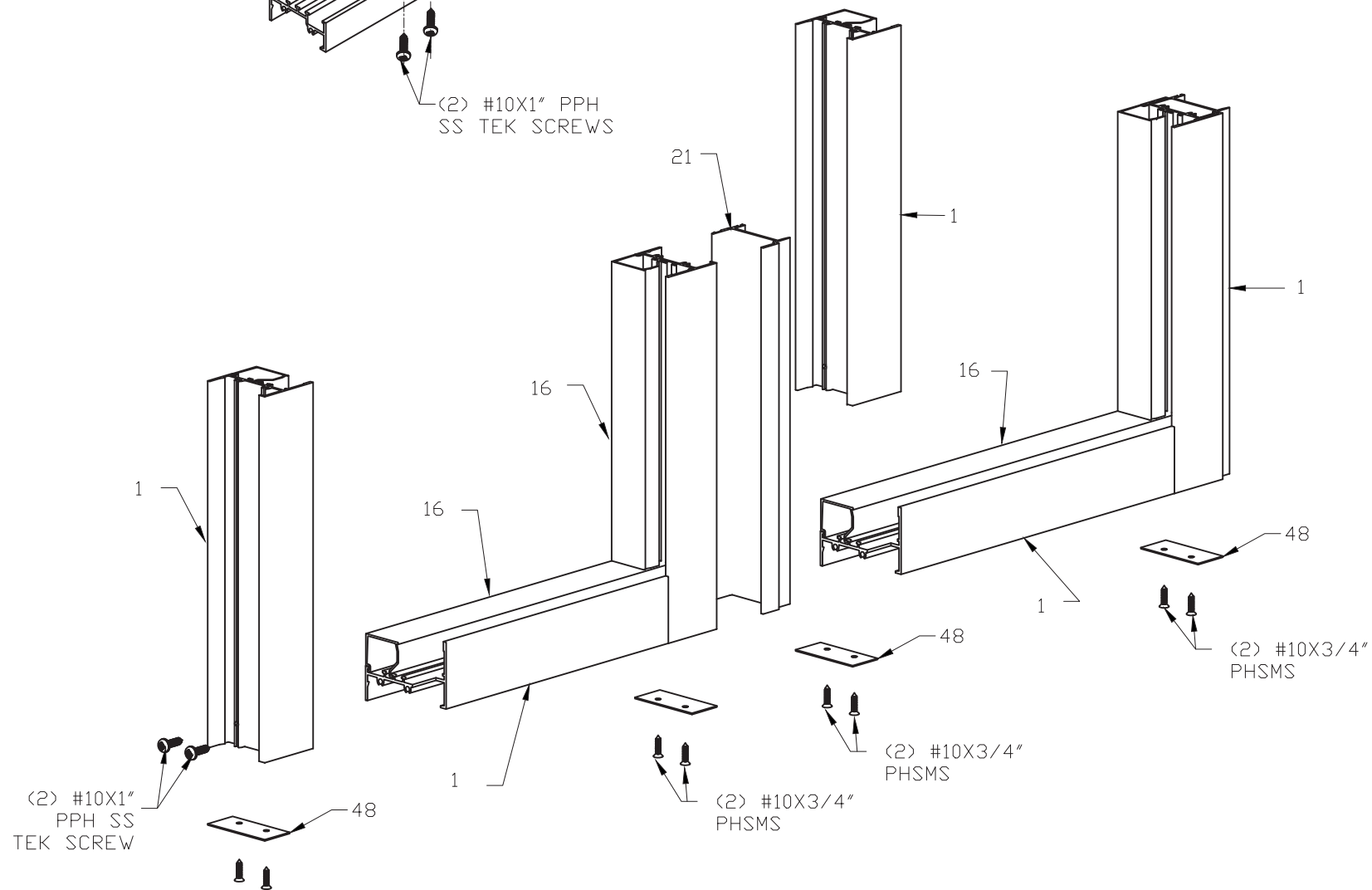
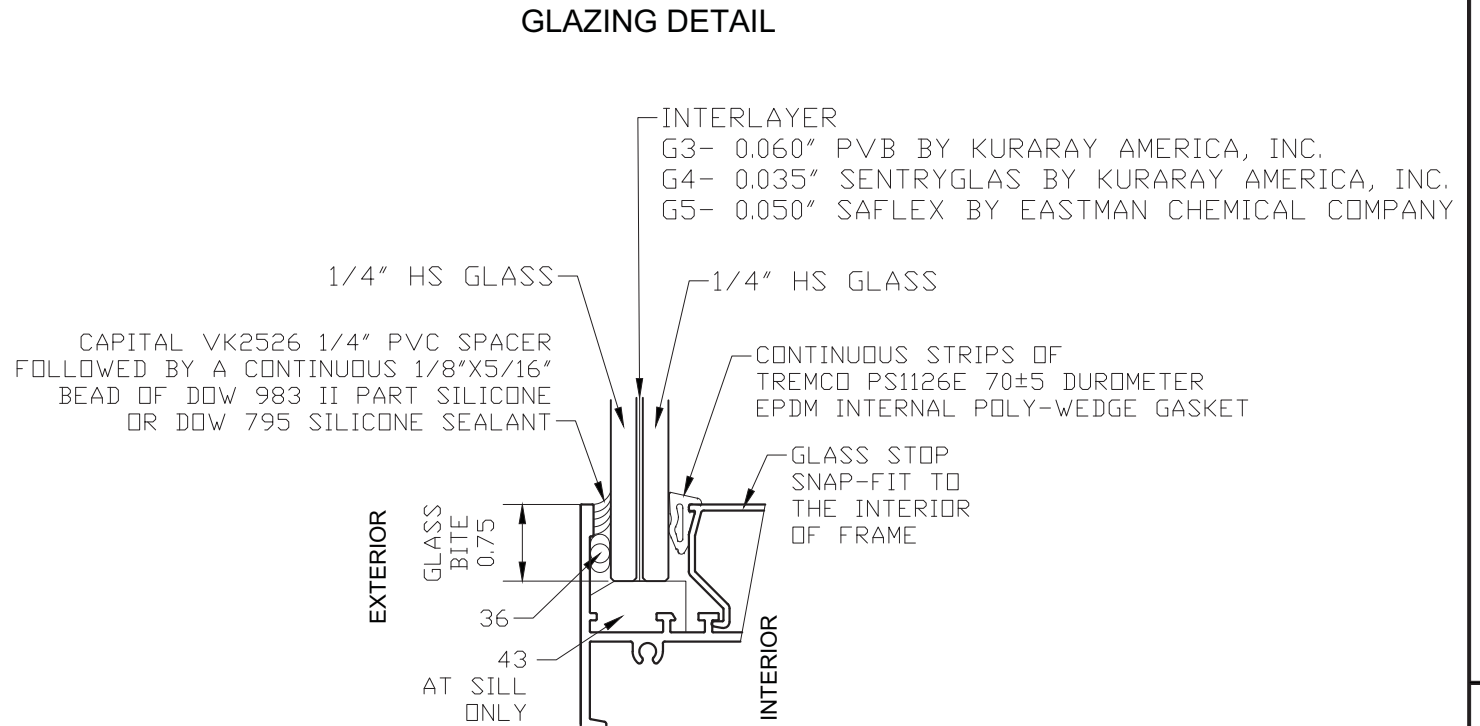
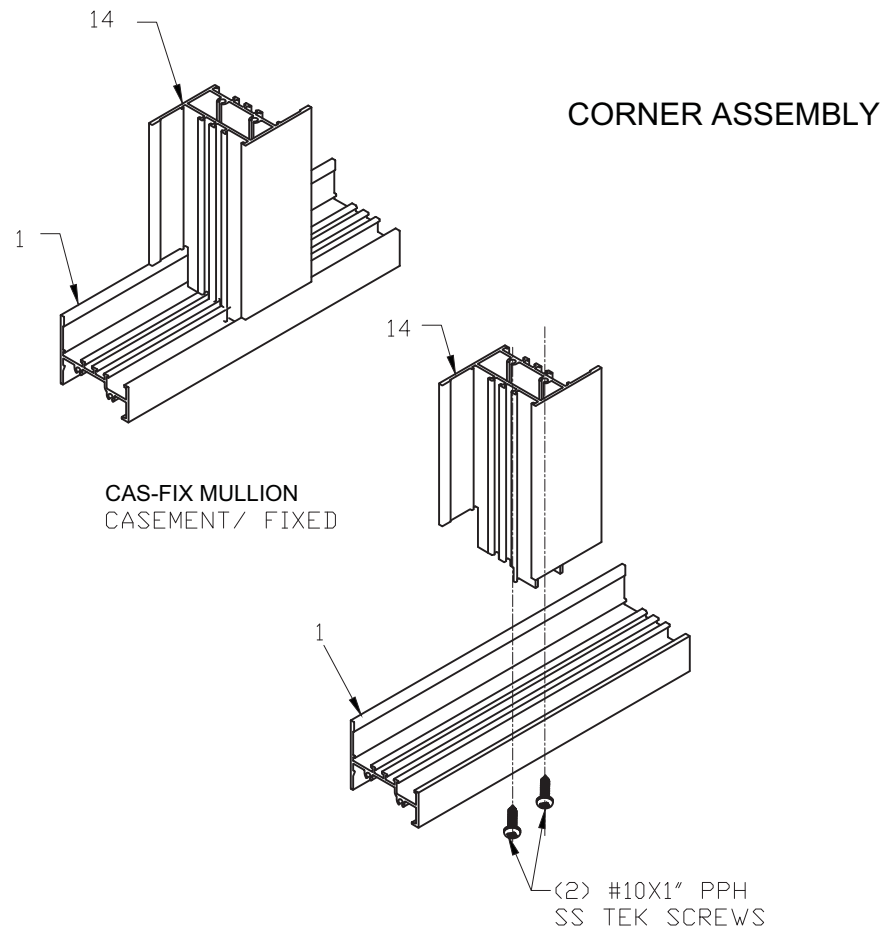


NRAP SERIES 2500 FIXED WINDOW (S.M.I.)
NR ARCHITECTURAL PRODUCTS
 4348 WESTROADS DRIVE
 WEST PALM BEACH, FL 33407
 TEL: (561) 844-1121 FAX: (561) 844-6131

MCY ENGINEERING, INC.
 GLAZING CONSULTANTS
 8501 SW 124 Ave. Ste. 205A P: 305.271.0117
 MIAMI, FL 33183 F: 305.279.6818
 www.MCYEngineering.com MCY.Engineering@Att.net

Rev. No.	Date	Drawn By	Description

Drawn Date 03/20/2017	Scale AS NOTED
DRAWING NO. AD17-11	
FLORIDA APPROVAL FL #22026.2	
Sheet No. 06 OF 07	



MCY ENGINEERING, INC.
 GLAZING CONSULTANTS

8501 SW 124 Ave. Ste. 205A P: 305.271.0117
 MIAMI, FL 33183 F: 305.279.6818

www.MCYEngineering.com MCY.Engineering@Att.net

NRAP SERIES 2500 FIXED WINDOW (S.M.I.)

NR ARCHITECTURAL PRODUCTS

4348 WESTROADS DRIVE
 WEST PALM BEACH, FL 33407
 TEL: (561) 844-1121 FAX: (561) 844-6131

Rev. No.	Date	Drawn By	Description

Drawn Date: 03/20/2017 Scale: AS NOTED

DRAWING NO. AD17-11

FLORIDA APPROVAL
 FL #22026.2

Sheet No. 07 OF 07